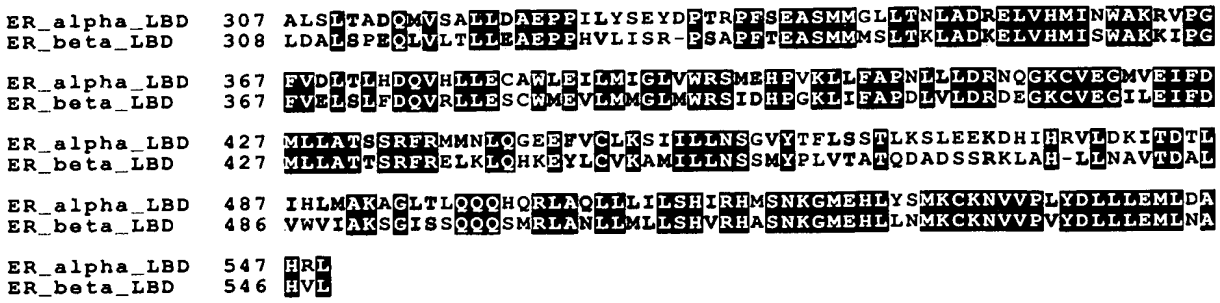
FIGURE 1



The coordinates of ER-beta/Genestein complex X-ray crystal structure

FIGURE 2

Unit Cell: 53.486 85.207 107.065 90.00 90.00 90.00
Space Group: P212121

		atom type	Res.	x	y	z			
ATOM	1	N	LEU A 311	0.971	-5.129	37.101	1.00	55.91	N
ATOM	2	CA	LEU A 311	1.453	-4.204	36.024	1.00	52.91	C
ATOM	3	C	LEU A 311	0.411	-3.151	35.699	1.00	52.76	C
ATOM	4	O	LEU A 311	0.662	-2.238	34.911	1.00	51.43	O
ATOM	5	CB	LEU A 311	1.933	-4.990	34.806	1.00	50.10	C
ATOM	6	CG	LEU A 311	3.007	-6.031	35.117	1.00	51.90	C
ATOM	7	CD1	LEU A 311	3.070	-7.107	34.063	1.00	55.02	C
ATOM	8	CD2	LEU A 311	4.361	-5.396	35.366	1.00	50.07	C
ATOM	9	N	SER A 312	-0.779	-3.304	36.277	1.00	48.17	N
ATOM	10	CA	SER A 312	-1.856	-2.323	36.154	1.00	45.76	C
ATOM	11	C	SER A 312	-1.257	-1.024	36.704	1.00	42.54	C
ATOM	12	O	SER A 312	-0.515	-1.023	37.696	1.00	40.55	O
ATOM	13	CB	SER A 312	-3.096	-2.816	36.876	1.00	42.53	C
ATOM	14	OG	SER A 312	-3.636	-1.866	37.778	1.00	44.17	O
ATOM	15	N	PRO A 313	-1.543	0.085	36.037	1.00	39.31	N
ATOM	16	CA	PRO A 313	-0.943	1.365	36.364	1.00	37.98	C
ATOM	17	C	PRO A 313	-0.958	1.765	37.812	1.00	38.63	C
ATOM	18	O	PRO A 313	0.140	1.992	38.375	1.00	38.34	O
ATOM	19	CB	PRO A 313	-1.582	2.348	35.397	1.00	35.68	C
ATOM	20	CG	PRO A 313	-2.035	1.509	34.261	1.00	40.46	C
ATOM	21	CD	PRO A 313	-2.427	0.172	34.851	1.00	37.34	C
ATOM	22	N	GLU A 314	-2.111	1.866	38.474	1.00	30.67	N
ATOM	23	CA	GLU A 314	-2.089	2.235	39.882	1.00	34.57	C
ATOM	24	C	GLU A 314	-1.249	1.270	40.711	1.00	30.99	C
ATOM	25	O	GLU A 314	-0.591	1.744	41.639	1.00	32.77	O
ATOM	26	CB	GLU A 314	-3.517	2.267	40.462	1.00	38.24	C
ATOM	27	CG	GLU A 314	-3.503	2.626	41.948	1.00	44.67	C
ATOM	28	CD	GLU A 314	-4.887	3.065	42.419	1.00	50.70	C
ATOM	29	OE1	GLU A 314	-5.884	2.794	41.711	1.00	48.91	O
ATOM	30	OE2	GLU A 314	-4.907	3.693	43.496	1.00	54.40	O
ATOM	31	N	GLN A 315	-1.337	-0.035	40.456	1.00	31.00	N
ATOM	32	CA	GLN A 315	-0.578	-0.989	41.250	1.00	37.11	C
ATOM	33	C	GLN A 315	0.937	-0.913	41.010	1.00	36.55	C
ATOM	34	O	GLN A 315	1.708	-0.982	41.951	1.00	33.12	O
ATOM	35	CB	GLN A 315	-1.014	-2.441	40.956	1.00	41.80	C
ATOM	36	CG	GLN A 315	-2.386	-2.674	41.588	1.00	51.16	C
ATOM	37	CD	GLN A 315	-3.004	-4.012	41.339	1.00	56.60	C
ATOM	38	OE1	GLN A 315	-4.222	-4.172	41.485	1.00	60.96	O
ATOM	39	NE2	GLN A 315	-2.210	-5.021	40.973	1.00	61.33	N
ATOM	40	N	LEU A 316	1.294	-0.818	39.727	1.00	34.75	N
ATOM	41	CA	LEU A 316	2.730	-0.721	39.378	1.00	32.58	C
ATOM	42	C	LEU A 316	3.327	0.491	40.058	1.00	29.66	C
ATOM	43	O	LEU A 316	4.414	0.401	40.654	1.00	29.13	O
ATOM	44	CB	LEU A 316	2.863	-0.742	37.857	1.00	32.85	C
ATOM	45	CG	LEU A 316	4.273	-0.604	37.276	1.00	36.22	C
ATOM	46	CD1	LEU A 316	5.272	-1.606	37.841	1.00	36.76	C
ATOM	47	CD2	LEU A 316	4.173	-0.851	35.774	1.00	32.29	C
ATOM	48	N	VAL A 317	2.642	1.640	40.063	1.00	29.47	N
ATOM	49	CA	VAL A 317	3.131	2.817	40.754	1.00	26.29	C
ATOM	50	C	VAL A 317	3.263	2.588	42.253	1.00	33.46	C
ATOM	51	O	VAL A 317	4.239	2.996	42.865	1.00	28.60	O
ATOM	52	CB	VAL A 317	2.278	4.055	40.488	1.00	27.01	C
ATOM	53	CG1	VAL A 317	2.703	5.285	41.242	1.00	30.45	C
ATOM	54	CG2	VAL A 317	2.278	4.300	38.964	1.00	25.96	C
ATOM	55	N	LEU A 318	2.236	1.951	42.850	1.00	30.90	N
ATOM	56	CA	LEU A 318	2.340	1.635	44.267	1.00	32.73	C
ATOM	57	C	LEU A 318	3.532	0.696	44.534	1.00	25.10	C
ATOM	58	O	LEU A 318	4.120	0.933	45.581	1.00	28.81	O
ATOM	59	CB	LEU A 318	1.051	1.062	44.813	1.00	33.80	C
ATOM	60	CG	LEU A 318	0.983	0.754	46.309	1.00	40.30	C
ATOM	61	CD1	LEU A 318	1.574	1.849	47.191	1.00	35.41	C
ATOM	62	CD2	LEU A 318	-0.488	0.535	46.684	1.00	40.42	C
ATOM	63	N	THR A 319	3.845	-0.268	43.727	1.00	26.05	N
ATOM	64	CA	THR A 319	4.970	-1.153	43.868	1.00	33.78	C
ATOM	65	C	THR A 319	6.274	-0.340	43.734	1.00	32.10	C
ATOM	66	O	THR A 319	7.212	-0.552	44.485	1.00	26.69	O
ATOM	67	CB	THR A 319	5.011	-2.308	42.863	1.00	32.57	C
ATOM	68	OG1	THR A 319	3.894	-3.206	43.075	1.00	41.02	O
ATOM	69	CG2	THR A 319	6,273	-3.163	43.004	1.00	34.97	C
ATOM	70	N	LEU A 320	6.295	0.635	42.823	1.00	33.55	N

ATOM	71	CA	LEU	A	320	7.508	1.473	42.689	1.00	27.98	C
ATOM	72	C	LEU	A	320	7.676	2.335	43.912	1.00	28.44	C
ATOM	73	O	LEU	A	320	8.787	2.559	44.387	1.00	24.05	O
ATOM	74	CB	LEU	A	320	7.433	2.242	41.372	1.00	26.83	C
ATOM	75	CG	LEU	A	320	7.423	1.436	40.083	1.00	26.50	C
ATOM	76	CD1	LEU	A	320	7.291	2.422	38.915	1.00	27.39	C
ATOM	77	CD2	LEU	A	320	8.656	0.587	39.837	1.00	30.76	C
ATOM	78	N	LEU	A	321	6.582	2.879	44.489	1.00	27.23	N
ATOM	79	CA	LEU	A	321	6.724	3.682	45.701	1.00	28.02	C
ATOM	80	C	LEU	A	321	7.271	2.823	46.840	1.00	28.69	C
ATOM	81	O	LEU	A	321	8.210	3.259	47.546	1.00	27.56	O
ATOM	82	CB	LEU	A	321	5.360	4.288	46.062	1.00	28.80	C
ATOM	83	CG	LEU	A	321	5.318	5.192	47.292	1.00	37.72	C
ATOM	84	CD1	LEU	A	321	6.011	6.518	47.054	1.00	38.86	C
ATOM	85	CD2	LEU	A	321	3.853	5.423	47.666	1.00	39.97	C
ATOM	86	N	GLU	A	322	6.792	1.595	47.016	1.00	31.64	N
ATOM	87	CA	GLU	A	322	7.292	0.747	48.104	1.00	30.94	C
ATOM	88	C	GLU	A	322	8.744	0.325	47.877	1.00	31.86	C
ATOM	89	O	GLU	A	322	9.429	0.024	48.861	1.00	30.98	O
ATOM	90	CB	GLU	A	322	6.504	-0.561	48.235	1.00	34.36	C
ATOM	91	CG	GLU	A	322	5.000	-0.329	48.246	1.00	44.87	C
ATOM	92	CD	GLU	A	322	4.194	-1.612	48.152	1.00	50.59	C
ATOM	93	OE1	GLU	A	322	4.633	-2.606	47.524	1.00	55.23	O
ATOM	94	OE2	GLU	A	322	3.085	-1.635	48.719	1.00	53.11	O
ATOM	95	N	ALA	A	323	9.186	0.251	46.621	1.00	30.12	N
ATOM	96	CA	ALA	A	323	10.557	-0.167	46.332	1.00	30.14	C
ATOM	97	C	ALA	A	323	11.543	0.966	46.514	1.00	27.90	C
ATOM	98	O	ALA	A	323	12.745	0.641	46.392	1.00	26.52	O
ATOM	99	CB	ALA	A	323	10.674	-0.686	44.890	1.00	30.03	C
ATOM	100	N	GLU	A	324	11.124	2.190	46.841	1.00	25.78	N
ATOM	101	CA	GLU	A	324	12.108	3.269	46.888	1.00	25.49	C
ATOM	102	C	GLU	A	324	13.191	2.929	47.911	1.00	28.63	C
ATOM	103	O	GLU	A	324	12.860	2.474	49.025	1.00	30.65	O
ATOM	104	CB	GLU	A	324	11.561	4.658	47.223	1.00	23.53	C
ATOM	105	CG	GLU	A	324	10.923	5.411	46.046	1.00	26.29	C
ATOM	106	CD	GLU	A	324	12.073	5.984	45.192	1.00	27.30	C
ATOM	107	OE1	GLU	A	324	12.478	5.247	44.305	1.00	26.25	O
ATOM	108	OE2	GLU	A	324	12.592	7.083	45.480	1.00	30.19	O
ATOM	109	N	PRO	A	325	14.456	3.133	47.590	1.00	25.18	N
ATOM	110	CA	PRO	A	325	15.520	2.894	48.547	1.00	26.69	C
ATOM	111	C	PRO	A	325	15.429	3.769	49.775	1.00	29.75	C
ATOM	112	O	PRO	A	325	14.908	4.886	49.777	1.00	32.58	O
ATOM	113	CB	PRO	A	325	16.818	3.256	47.789	1.00	30.40	C
ATOM	114	CG	PRO	A	325	16.365	4.075	46.636	1.00	32.28	C
ATOM	115	CD	PRO	A	325	14.939	3.733	46.305	1.00	22.13	C
ATOM	116	N	PRO	A	326	16.058	3.331	50.879	1.00	33.46	N
ATOM	117	CA	PRO	A	326	16.116	4.073	52.109	1.00	36.27	C
ATOM	118	C	PRO	A	326	17.047	5.260	51.951	1.00	36.99	C
ATOM	119	O	PRO	A	326	17.971	5.196	51.130	1.00	36.32	O
ATOM	120	CB	PRO	A	326	16.739	3.076	53.107	1.00	37.47	C
ATOM	121	CG	PRO	A	326	17.626	2.236	52.249	1.00	39.51	C
ATOM	122	CD	PRO	A	326	16.851	2.079	50.939	1.00	36.10	C
ATOM	123	N	HIS	A	327	16.899	6.282	52.788	1.00	38.59	N
ATOM	124	CA	HIS	A	327	17.847	7.406	52.678	1.00	40.75	C
ATOM	125	C	HIS	A	327	19.230	6.940	53.079	1.00	36.06	C
ATOM	126	O	HIS	A	327	19.395	6.138	54.018	1.00	32.53	O
ATOM	127	CB	HIS	A	327	17.300	8.555	53.528	1.00	45.73	C
ATOM	128	CG	HIS	A	327	15.987	9.043	52.982	1.00	53.44	C
ATOM	129	ND1	HIS	A	327	14.957	8.186	52.665	1.00	59.65	N
ATOM	130	CD2	HIS	A	327	15.530	10.278	52.688	1.00	56.60	C
ATOM	131	CE1	HIS	A	327	13.920	8.860	52.202	1.00	59.43	C
ATOM	132	NE2	HIS	A	327	14.244	10.137	52.209	1.00	60.32	N
ATOM	133	N	VAL	A	328	20.282	7.369	52.404	1.00	32.13	N
ATOM	134	CA	VAL	A	328	21.657	6.980	52.751	1.00	36.60	C
ATOM	135	C	VAL	A	328	22.288	8.070	53.608	1.00	43.74	C
ATOM	136	O	VAL	A	328	22.291	9.188	53.071	1.00	51.71	O
ATOM	137	CB	VAL	A	328	22.619	6.823	51.549	1.00	35.11	C
ATOM	138	CG1	VAL	A	328	24.068	6.722	52.020	1.00	34.13	C
ATOM	139	CG2	VAL	A	328	22.189	5.603	50.768	1.00	31.62	C
ATOM	140	N	LEU	A	329	22.788	7.715	54.770	1.00	44.76	N
ATOM	141	CA	LEU	A	329	23.338	8.705	55.672	1.00	49.06	C
ATOM	142	C	LEU	A	329	24.833	8.942	55.562	1.00	47.49	C
ATOM	143	O	LEU	A	329	25.601	8.211	56.188	1.00	53.01	O
ATOM	144	CB	LEU	A	329	23.008	8.250	57.121	1.00	51.57	C
ATOM	145	CG	LEU	A	329	21.485	7.974	57.281	1.00	55.29	C
ATOM	146	CD1	LEU	A	329	21.206	7.139	58.539	1.00	56.60	C
ATOM	147	CD2	LEU	A	329	20.781	9.337	57.445	1.00	56.44	C

ATOM	148	N	ILE	A	330	25.227	9.937	54.768	1.00	47.68	N
ATOM	149	CA	ILE	A	330	26.650	10.243	54.682	1.00	43.16	C
ATOM	150	C	ILE	A	330	26.808	11.652	55.247	1.00	44.09	C
ATOM	151	O	ILE	A	330	25.993	12.531	54.992	1.00	39.19	O
ATOM	152	CB	ILE	A	330	27.268	10.097	53.297	1.00	43.80	C
ATOM	153	CG1	ILE	A	330	28.801	10.199	53.394	1.00	35.76	C
ATOM	154	CG2	ILE	A	330	26.714	11.120	52.329	1.00	37.55	C
ATOM	155	CD1	ILE	A	330	29.485	9.364	52.319	1.00	37.90	C
ATOM	156	N	SER	A	331	27.880	11.847	56.030	1.00	46.29	N
ATOM	157	CA	SER	A	331	28.030	13.202	56.563	1.00	49.87	C
ATOM	158	C	SER	A	331	29.267	13.807	55.914	1.00	52.53	C
ATOM	159	O	SER	A	331	30.160	13.053	55.533	1.00	49.80	O
ATOM	160	CB	SER	A	331	28.213	13.243	58.076	1.00	48.11	C
ATOM	161	OG	SER	A	331	26.912	13.454	58.596	1.00	52.06	O
ATOM	162	N	ARG	A	332	29.295	15.124	55.816	1.00	51.02	N
ATOM	163	CA	ARG	A	332	30.453	15.793	55.247	1.00	47.44	C
ATOM	164	C	ARG	A	332	31.719	15.467	56.048	1.00	46.53	C
ATOM	165	O	ARG	A	332	31.584	15.127	57.211	1.00	44.60	O
ATOM	166	CB	ARG	A	332	30.312	17.307	55.395	1.00	49.11	C
ATOM	167	CG	ARG	A	332	30.002	18.071	54.130	1.00	47.15	C
ATOM	168	CD	ARG	A	332	29.914	19.560	54.480	1.00	48.27	C
ATOM	169	NE	ARG	A	332	29.062	20.225	53.493	1.00	45.94	N
ATOM	170	CZ	ARG	A	332	29.569	20.997	52.531	1.00	44.52	C
ATOM	171	NH1	ARG	A	332	28.715	21.538	51.674	1.00	43.36	N
ATOM	172	NH2	ARG	A	332	30.873	21.223	52.439	1.00	41.93	N
ATOM	173	N	PRO	A	333	32.861	15.669	55.438	1.00	46.60	N
ATOM	174	CA	PRO	A	333	34.114	15.452	56.141	1.00	50.04	C
ATOM	175	C	PRO	A	333	34.378	16.619	57.093	1.00	50.91	C
ATOM	176	O	PRO	A	333	33.758	17.679	56.986	1.00	46.07	O
ATOM	177	CB	PRO	A	333	35.192	15.402	55.062	1.00	51.24	C
ATOM	178	CG	PRO	A	333	34.581	16.017	53.857	1.00	51.07	C
ATOM	179	CD	PRO	A	333	33.091	16.096	54.045	1.00	48.89	C
ATOM	180	N	SER	A	334	35.273	16.359	58.036	1.00	54.26	N
ATOM	181	CA	SER	A	334	35.698	17.405	58.971	1.00	59.74	C
ATOM	182	C	SER	A	334	36.973	17.950	58.320	1.00	58.71	C
ATOM	183	O	SER	A	334	37.913	17.172	58.137	1.00	61.30	O
ATOM	184	CB	SER	A	334	35.976	16.884	60.365	1.00	57.11	C
ATOM	185	OG	SER	A	334	35.815	17.982	61.246	1.00	65.66	O
ATOM	186	N	ALA	A	335	36.927	19.173	57.850	1.00	57.04	N
ATOM	187	CA	ALA	A	335	38.032	19.809	57.136	1.00	57.50	C
ATOM	188	C	ALA	A	335	37.420	20.176	55.781	1.00	56.09	C
ATOM	189	O	ALA	A	335	36.664	19.356	55.256	1.00	56.58	O
ATOM	190	CB	ALA	A	335	39.255	18.963	56.851	1.00	55.12	C
ATOM	191	N	PRO	A	336	37.677	21.372	55.299	1.00	55.44	N
ATOM	192	CA	PRO	A	336	37.107	21.770	54.016	1.00	47.77	C
ATOM	193	C	PRO	A	336	37.465	20.746	52.949	1.00	43.81	C
ATOM	194	O	PRO	A	336	38.438	19.982	53.033	1.00	35.36	O
ATOM	195	CB	PRO	A	336	37.643	23.167	53.817	1.00	50.74	C
ATOM	196	CG	PRO	A	336	38.306	23.605	55.069	1.00	51.78	C
ATOM	197	CD	PRO	A	336	38.561	22.389	55.913	1.00	52.02	C
ATOM	198	N	PHE	A	337	36.688	20.667	51.872	1.00	38.45	N
ATOM	199	CA	PHE	A	337	36.930	19.690	50.829	1.00	38.41	C
ATOM	200	C	PHE	A	337	38.188	19.870	50.003	1.00	36.62	C
ATOM	201	O	PHE	A	337	38.535	21.009	49.768	1.00	37.09	O
ATOM	202	CB	PHE	A	337	35.767	19.748	49.808	1.00	34.49	C
ATOM	203	CG	PHE	A	337	34.594	18.891	50.176	1.00	29.83	C
ATOM	204	CD1	PHE	A	337	34.797	17.520	50.284	1.00	26.36	C
ATOM	205	CD2	PHE	A	337	33.337	19.405	50.381	1.00	33.91	C
ATOM	206	CE1	PHE	A	337	33.783	16.653	50.608	1.00	30.38	C
ATOM	207	CE2	PHE	A	337	32.304	18.537	50.729	1.00	33.76	C
ATOM	208	CZ	PHE	A	337	32.524	17.176	50.818	1.00	30.40	C
ATOM	209	N	THR	A	338	38.822	18.764	49.605	1.00	35.69	N
ATOM	210	CA	THR	A	338	39.931	18.850	48.667	1.00	34.49	C
ATOM	211	C	THR	A	338	39.521	18.042	47.428	1.00	36.55	C
ATOM	212	O	THR	A	338	38.489	17.354	47.471	1.00	33.13	O
ATOM	213	CB	THR	A	338	41.227	18.242	49.174	1.00	37.42	C
ATOM	214	OG1	THR	A	338	40.992	16.847	49.378	1.00	34.86	O
ATOM	215	CG2	THR	A	338	41.695	18.905	50.466	1.00	39.82	C
ATOM	216	N	GLU	A	339	40.299	18.060	46.356	1.00	38.20	N
ATOM	217	CA	GLU	A	339	39.939	17.245	45.182	1.00	31.68	C
ATOM	218	C	GLU	A	339	39.804	15.784	45.602	1.00	34.71	C
ATOM	219	O	GLU	A	339	38.782	15.149	45.344	1.00	29.59	O
ATOM	220	CB	GLU	A	339	40.948	17.416	44.063	1.00	33.81	C
ATOM	221	CG	GLU	A	339	40.500	16.717	42.776	1.00	34.94	C
ATOM	222	CD	GLU	A	339	41.430	17.024	41.627	1.00	35.71	C
ATOM	223	OE1	GLU	A	339	42.466	16.332	41.550	1.00	40.73	O
ATOM	224	OE2	GLU	A	339	41.125	17.947	40.853	1.00	39.23	O

ATOM	225	N	ALA	A	340	40.740	15.237	46.384	1.00	30.70	N
ATOM	226	CA	ALA	A	340	40.665	13.863	46.831	1.00	27.77	C
ATOM	227	C	ALA	A	340	39.502	13.519	47.748	1.00	25.62	C
ATOM	228	O	ALA	A	340	38.927	12.448	47.552	1.00	27.51	O
ATOM	229	CB	ALA	A	340	41.931	13.448	47.601	1.00	29.10	C
ATOM	230	N	SER	A	341	39.226	14.388	48.720	1.00	26.84	N
ATOM	231	CA	SER	A	341	38.196	14.096	49.708	1.00	29.79	C
ATOM	232	C	SER	A	341	36.803	14.291	49.100	1.00	28.43	C
ATOM	233	O	SER	A	341	35.920	13.514	49.464	1.00	26.98	O
ATOM	234	CB	SER	A	341	38.420	14.894	51.001	1.00	26.89	C
ATOM	235	OG	SER	A	341	38.028	16.252	50.905	1.00	30.59	O
ATOM	236	N	MET	A	342	36.644	15.260	48.188	1.00	26.89	N
ATOM	237	CA	MET	A	342	35.292	15.347	47.551	1.00	23.72	C
ATOM	238	C	MET	A	342	35.145	14.123	46.629	1.00	28.77	C
ATOM	239	O	MET	A	342	34.075	13.509	46.708	1.00	26.04	O
ATOM	240	CB	MET	A	342	35.126	16.618	46.749	1.00	25.36	C
ATOM	241	CG	MET	A	342	33.749	16.704	46.050	1.00	28.37	C
ATOM	242	SD	MET	A	342	33.464	18.319	45.306	1.00	28.56	S
ATOM	243	CE	MET	A	342	33.156	19.429	46.631	1.00	33.24	C
ATOM	244	N	MET	A	343	36.180	13.703	45.885	1.00	25.81	N
ATOM	245	CA	MET	A	343	36.015	12.491	45.066	1.00	25.62	C
ATOM	246	C	MET	A	343	35.803	11.283	45.963	1.00	28.46	C
ATOM	247	O	MET	A	343	34.998	10.391	45.669	1.00	24.46	O
ATOM	248	CB	MET	A	343	37.130	12.226	44.064	1.00	18.08	C
ATOM	249	CG	MET	A	343	37.256	13.268	42.943	1.00	22.77	C
ATOM	250	SD	MET	A	343	35.660	13.268	41.976	1.00	24.43	S
ATOM	251	CE	MET	A	343	35.546	11.509	41.690	1.00	24.64	C
ATOM	252	N	MET	A	344	36.401	11.204	47.163	1.00	23.55	N
ATOM	253	CA	MET	A	344	36.150	10.057	48.034	1.00	21.04	C
ATOM	254	C	MET	A	344	34.727	10.018	48.589	1.00	22.36	C
ATOM	255	O	MET	A	344	34.109	8.962	48.755	1.00	22.72	O
ATOM	256	CB	MET	A	344	37.106	10.117	49.236	1.00	28.70	C
ATOM	257	CG	MET	A	344	36.782	9.085	50.305	1.00	39.38	C
ATOM	258	SD	MET	A	344	38.017	9.192	51.632	1.00	46.12	S
ATOM	259	CE	MET	A	344	39.321	8.239	50.809	1.00	47.00	C
ATOM	260	N	SER	A	345	34.189	11.164	48.919	1.00	22.84	N
ATOM	261	CA	SER	A	345	32.839	11.285	49.427	1.00	22.70	C
ATOM	262	C	SER	A	345	31.804	10.862	48.332	1.00	21.50	C
ATOM	263	O	SER	A	345	30.891	10.084	48.632	1.00	21.09	O
ATOM	264	CB	SER	A	345	32.520	12.718	49.846	1.00	26.69	C
ATOM	265	OG	SER	A	345	33.175	12.967	51.105	1.00	26.93	O
ATOM	266	N	LEU	A	346	32.043	11.312	47.136	1.00	20.73	N
ATOM	267	CA	LEU	A	346	31.063	10.950	46.059	1.00	21.78	C
ATOM	268	C	LEU	A	346	31.140	9.484	45.733	1.00	19.80	C
ATOM	269	O	LEU	A	346	30.092	8.886	45.524	1.00	20.97	O
ATOM	270	CB	LEU	A	346	31.316	11.808	44.825	1.00	20.76	C
ATOM	271	CG	LEU	A	346	31.072	13.318	44.954	1.00	24.44	C
ATOM	272	CD1	LEU	A	346	31.454	14.028	43.664	1.00	27.57	C
ATOM	273	CD2	LEU	A	346	29.603	13.613	45.260	1.00	24.42	C
ATOM	274	N	THR	A	347	32.338	8.877	45.732	1.00	18.51	N
ATOM	275	CA	THR	A	347	32.414	7.450	45.373	1.00	21.98	C
ATOM	276	C	THR	A	347	31.983	6.573	46.524	1.00	24.51	C
ATOM	277	O	THR	A	347	31.368	5.529	46.275	1.00	23.87	O
ATOM	278	CB	THR	A	347	33.796	7.089	44.809	1.00	25.39	C
ATOM	279	OG1	THR	A	347	34.738	7.391	45.842	1.00	21.99	O
ATOM	280	CG2	THR	A	347	34.123	7.889	43.565	1.00	25.92	C
ATOM	281	N	LYS	A	348	32.185	6.947	47.799	1.00	24.27	N
ATOM	282	CA	LYS	A	348	31.650	6.172	48.913	1.00	22.75	C
ATOM	283	C	LYS	A	348	30.115	6.236	48.952	1.00	20.19	C
ATOM	284	O	LYS	A	348	29.438	5.260	49.278	1.00	20.54	O
ATOM	285	CB	LYS	A	348	32.116	6.807	50.258	1.00	30.65	C
ATOM	286	CG	LYS	A	348	31.525	6.139	51.484	1.00	38.85	C
ATOM	287	CD	LYS	A	348	32.566	5.870	52.566	1.00	51.23	C
ATOM	288	CE	LYS	A	348	32.062	4.767	53.515	1.00	53.45	C
ATOM	289	NZ	LYS	A	348	33.152	4.400	54.471	1.00	61.29	N
ATOM	290	N	LEU	A	349	29.568	7.436	48.668	1.00	21.35	N
ATOM	291	CA	LEU	A	349	28.098	7.606	48.692	1.00	20.62	C
ATOM	292	C	LEU	A	349	27.531	6.728	47.554	1.00	20.65	C
ATOM	293	O	LEU	A	349	26.554	6.036	47.757	1.00	18.64	O
ATOM	294	CB	LEU	A	349	27.658	9.049	48.459	1.00	20.47	C
ATOM	295	CG	LEU	A	349	26.159	9.320	48.202	1.00	24.04	C
ATOM	296	CD1	LEU	A	349	25.303	8.888	49.386	1.00	23.46	C
ATOM	297	CD2	LEU	A	349	25.830	10.812	48.019	1.00	22.26	C
ATOM	298	N	ALA	A	350	28.198	6.787	46.386	1.00	19.00	N
ATOM	299	CA	ALA	A	350	27.723	5.962	45.252	1.00	21.07	C
ATOM	300	C	ALA	A	350	27.733	4.475	45.613	1.00	19.81	C
ATOM	301	O	ALA	A	350	26.784	3.733	45.385	1.00	18.86	O

ATOM	302	CB	ALA	A	350	28.558	6.162	43.988	1.00	20.94	C
ATOM	303	N	ASP	A	351	28.807	4.047	46.335	1.00	23.60	N
ATOM	304	CA	ASP	A	351	28.879	2.611	46.709	1.00	23.15	C
ATOM	305	C	ASP	A	351	27.698	2.216	47.569	1.00	21.31	C
ATOM	306	O	ASP	A	351	26.994	1.228	47.345	1.00	22.54	O
ATOM	307	CB	ASP	A	351	30.222	2.317	47.405	1.00	24.66	C
ATOM	308	CG	ASP	A	351	30.369	0.831	47.750	1.00	24.20	C
ATOM	309	OD1	ASP	A	351	30.751	0.016	46.881	1.00	22.60	O
ATOM	310	OD2	ASP	A	351	30.083	0.368	48.854	1.00	27.97	O
ATOM	311	N	LYS	A	352	27.319	3.080	48.505	1.00	18.89	N
ATOM	312	CA	LYS	A	352	26.231	2.812	49.429	1.00	25.83	C
ATOM	313	C	LYS	A	352	24.908	2.730	48.660	1.00	23.96	C
ATOM	314	O	LYS	A	352	24.066	1.863	48.897	1.00	23.98	O
ATOM	315	CB	LYS	A	352	26.165	3.884	50.514	1.00	29.24	C
ATOM	316	CG	LYS	A	352	27.383	3.864	51.460	1.00	37.75	C
ATOM	317	CD	LYS	A	352	27.337	5.094	52.366	1.00	41.30	C
ATOM	318	CE	LYS	A	352	28.428	5.141	53.406	1.00	47.71	C
ATOM	319	NZ	LYS	A	352	28.383	6.407	54.191	1.00	57.64	N
ATOM	320	N	GLU	A	353	24.728	3.733	47.785	1.00	18.65	N
ATOM	321	CA	GLU	A	353	23.473	3.732	47.012	1.00	19.52	C
ATOM	322	C	GLU	A	353	23.422	2.552	46.054	1.00	19.13	C
ATOM	323	O	GLU	A	353	22.313	2.097	45.724	1.00	21.39	O
ATOM	324	CB	GLU	A	353	23.330	5.038	46.198	1.00	22.06	C
ATOM	325	CG	GLU	A	353	23.214	6.231	47.159	1.00	21.74	C
ATOM	326	CD	GLU	A	353	22.893	7.495	46.368	1.00	24.03	C
ATOM	327	OE1	GLU	A	353	21.699	7.700	46.076	1.00	23.53	O
ATOM	328	OE2	GLU	A	353	23.754	8.285	46.001	1.00	23.99	O
ATOM	329	N	LEU	A	354	24.577	2.155	45.504	1.00	16.94	N
ATOM	330	CA	LEU	A	354	24.568	1.032	44.534	1.00	20.92	C
ATOM	331	C	LEU	A	354	24.138	-0.261	45.217	1.00	20.96	C
ATOM	332	O	LEU	A	354	23.455	-1.036	44.517	1.00	21.13	O
ATOM	333	CB	LEU	A	354	25.922	0.856	43.824	1.00	19.93	C
ATOM	334	CG	LEU	A	354	26.275	1.921	42.787	1.00	17.91	C
ATOM	335	CD1	LEU	A	354	27.778	1.969	42.528	1.00	18.30	C
ATOM	336	CD2	LEU	A	354	25.567	1.655	41.478	1.00	22.25	C
ATOM	337	N	VAL	A	355	24.454	-0.450	46.503	1.00	24.62	N
ATOM	338	CA	VAL	A	355	23.931	-1.679	47.168	1.00	24.78	C
ATOM	339	C	VAL	A	355	22.415	-1.611	47.189	1.00	22.47	C
ATOM	340	O	VAL	A	355	21.745	-2.574	46.806	1.00	24.58	O
ATOM	341	CB	VAL	A	355	24.375	-1.768	48.649	1.00	27.79	C
ATOM	342	CG1	VAL	A	355	23.758	-2.998	49.293	1.00	28.19	C
ATOM	343	CG2	VAL	A	355	25.902	-1.767	48.678	1.00	29.07	C
ATOM	344	N	HIS	A	356	21.817	-0.473	47.556	1.00	22.33	N
ATOM	345	CA	HIS	A	356	20.366	-0.318	47.555	1.00	23.50	C
ATOM	346	C	HIS	A	356	19.747	-0.390	46.156	1.00	25.98	C
ATOM	347	O	HIS	A	356	18.603	-0.823	45.985	1.00	20.85	O
ATOM	348	CB	HIS	A	356	19.973	1.059	48.154	1.00	25.64	C
ATOM	349	CG	HIS	A	356	20.417	1.150	49.594	1.00	30.50	C
ATOM	350	ND1	HIS	A	356	20.380	0.032	50.404	1.00	36.00	N
ATOM	351	CD2	HIS	A	356	20.901	2.131	50.348	1.00	33.71	C
ATOM	352	CE1	HIS	A	356	20.836	0.334	51.603	1.00	38.33	C
ATOM	353	NE2	HIS	A	356	21.149	1.608	51.614	1.00	35.34	N
ATOM	354	N	MET	A	357	20.475	0.096	45.141	1.00	22.11	N
ATOM	355	CA	MET	A	357	19.922	0.085	43.760	1.00	23.05	C
ATOM	356	C	MET	A	357	19.671	-1.353	43.318	1.00	22.29	C
ATOM	357	O	MET	A	357	18.676	-1.604	42.647	1.00	22.13	O
ATOM	358	CB	MET	A	357	20.869	0.761	42.761	1.00	20.67	C
ATOM	359	CG	MET	A	357	20.200	1.079	41.381	1.00	17.48	C
ATOM	360	SD	MET	A	357	21.487	1.628	40.215	1.00	18.70	S
ATOM	361	CE	MET	A	357	21.975	3.188	40.968	1.00	21.32	C
ATOM	362	N	ILE	A	358	20.563	-2.306	43.693	1.00	19.95	N
ATOM	363	CA	ILE	A	358	20.278	-3.705	43.318	1.00	23.22	C
ATOM	364	C	ILE	A	358	18.954	-4.180	43.932	1.00	26.07	C
ATOM	365	O	ILE	A	358	18.170	-4.859	43.261	1.00	26.53	O
ATOM	366	CB	ILE	A	358	21.371	-4.633	43.891	1.00	24.88	C
ATOM	367	CG1	ILE	A	358	22.731	-4.358	43.262	1.00	31.03	C
ATOM	368	CG2	ILE	A	358	21.074	-6.125	43.773	1.00	33.68	C
ATOM	369	CD1	ILE	A	358	22.836	-4.417	41.769	1.00	32.41	C
ATOM	370	N	SER	A	359	18.749	-3.920	45.215	1.00	23.68	N
ATOM	371	CA	SER	A	359	17.524	-4.297	45.906	1.00	27.31	C
ATOM	372	C	SER	A	359	16.307	-3.645	45.281	1.00	26.81	C
ATOM	373	O	SER	A	359	15.259	-4.304	45.149	1.00	24.44	O
ATOM	374	CB	SER	A	359	17.526	-3.949	47.422	1.00	26.99	C
ATOM	375	OG	SER	A	359	18.585	-4.728	47.964	1.00	38.36	O
ATOM	376	N	TRP	A	360	16.440	-2.402	44.872	1.00	20.43	N
ATOM	377	CA	TRP	A	360	15.336	-1.654	44.241	1.00	20.64	C
ATOM	378	C	TRP	A	360	14.948	-2.256	42.910	1.00	21.97	C

ATOM	379	O	TRP	A	360	13.758	-2.569	42.651	1.00	23.85	O
ATOM	380	CB	TRP	A	360	15.787	-0.183	44.026	1.00	22.61	C
ATOM	381	CG	TRP	A	360	14.982	0.581	43.022	1.00	22.58	C
ATOM	382	CD1	TRP	A	360	13.724	1.108	43.219	1.00	24.32	C
ATOM	383	CD2	TRP	A	360	15.352	0.891	41.666	1.00	21.14	C
ATOM	384	NE1	TRP	A	360	13.302	1.741	42.050	1.00	22.74	N
ATOM	385	CE2	TRP	A	360	14.278	1.619	41.098	1.00	22.86	C
ATOM	386	CE3	TRP	A	360	16.492	0.703	40.922	1.00	16.31	C
ATOM	387	CZ2	TRP	A	360	14.321	2.172	39.807	1.00	22.60	C
ATOM	388	CZ3	TRP	A	360	16.550	1.216	39.616	1.00	21.78	C
ATOM	389	CH2	TRP	A	360	15.477	1.930	39.084	1.00	18.56	C
ATOM	390	N	ALA	A	361	15.953	-2.554	42.082	1.00	20.48	N
ATOM	391	CA	ALA	A	361	15.724	-3.136	40.771	1.00	24.14	C
ATOM	392	C	ALA	A	361	15.009	-4.478	40.913	1.00	26.60	C
ATOM	393	O	ALA	A	361	14.137	-4.799	40.095	1.00	27.72	O
ATOM	394	CB	ALA	A	361	17.037	-3.312	40.014	1.00	23.41	C
ATOM	395	N	LYS	A	362	15.357	-5.249	41.958	1.00	26.22	N
ATOM	396	CA	LYS	A	362	14.708	-6.564	42.127	1.00	26.09	C
ATOM	397	C	LYS	A	362	13.273	-6.438	42.572	1.00	27.56	C
ATOM	398	O	LYS	A	362	12.486	-7.396	42.492	1.00	28.56	O
ATOM	399	CB	LYS	A	362	15.609	-7.446	43.018	1.00	31.05	C
ATOM	400	CG	LYS	A	362	16.947	-7.716	42.322	1.00	33.04	C
ATOM	401	CD	LYS	A	362	17.809	-8.604	43.227	1.00	39.64	C
ATOM	402	CE	LYS	A	362	18.966	-9.239	42.480	1.00	41.35	C
ATOM	403	NZ	LYS	A	362	19.957	-9.851	43.441	1.00	44.61	N
ATOM	404	N	LYS	A	363	12.818	-5.284	43.041	1.00	29.47	N
ATOM	405	CA	LYS	A	363	11.444	-5.081	43.441	1.00	29.52	C
ATOM	406	C	LYS	A	363	10.513	-4.591	42.331	1.00	36.08	C
ATOM	407	O	LYS	A	363	9.292	-4.506	42.590	1.00	31.07	O
ATOM	408	CB	LYS	A	363	11.329	-4.144	44.611	1.00	30.07	C
ATOM	409	CG	LYS	A	363	11.820	-4.650	45.939	1.00	33.52	C
ATOM	410	CD	LYS	A	363	11.809	-3.501	46.942	1.00	35.99	C
ATOM	411	CE	LYS	A	363	12.392	-3.957	48.275	1.00	40.38	C
ATOM	412	NZ	LYS	A	363	13.862	-4.097	48.227	1.00	43.85	N
ATOM	413	N	ILE	A	364	11.033	-4.284	41.164	1.00	30.49	N
ATOM	414	CA	ILE	A	364	10.245	-3.884	40.013	1.00	36.46	C
ATOM	415	C	ILE	A	364	9.684	-5.159	39.377	1.00	37.50	C
ATOM	416	O	ILE	A	364	10.438	-6.022	38.937	1.00	33.78	O
ATOM	417	CB	ILE	A	364	11.099	-3.127	38.995	1.00	33.25	C
ATOM	418	CG1	ILE	A	364	11.618	-1.828	39.650	1.00	33.92	C
ATOM	419	CG2	ILE	A	364	10.359	-2.830	37.703	1.00	37.49	C
ATOM	420	CD1	ILE	A	364	12.686	-1.134	38.838	1.00	29.17	C
ATOM	421	N	PRO	A	365	8.363	-5.269	39.351	1.00	40.37	N
ATOM	422	CA	PRO	A	365	7.691	-6.449	38.834	1.00	40.35	C
ATOM	423	C	PRO	A	365	8.279	-6.909	37.527	1.00	38.24	C
ATOM	424	O	PRO	A	365	8.500	-6.088	36.655	1.00	36.01	O
ATOM	425	CB	PRO	A	365	6.220	-6.019	38.708	1.00	39.06	C
ATOM	426	CG	PRO	A	365	6.103	-5.098	39.901	1.00	39.95	C
ATOM	427	CD	PRO	A	365	7.379	-4.275	39.835	1.00	41.03	C
ATOM	428	N	GLY	A	366	8.650	-8.190	37.442	1.00	39.52	N
ATOM	429	CA	GLY	A	366	9.192	-8.725	36.216	1.00	39.49	C
ATOM	430	C	GLY	A	366	10.687	-8.686	36.054	1.00	35.99	C
ATOM	431	O	GLY	A	366	11.234	-9.500	35.322	1.00	34.12	O
ATOM	432	N	PHE	A	367	11.361	-7.787	36.785	1.00	35.43	N
ATOM	433	CA	PHE	A	367	12.806	-7.698	36.677	1.00	34.62	C
ATOM	434	C	PHE	A	367	13.529	-9.009	37.030	1.00	27.50	C
ATOM	435	O	PHE	A	367	14.385	-9.403	36.245	1.00	29.96	O
ATOM	436	CB	PHE	A	367	13.354	-6.572	37.552	1.00	32.50	C
ATOM	437	CG	PHE	A	367	14.805	-6.279	37.261	1.00	32.90	C
ATOM	438	CD1	PHE	A	367	15.144	-5.390	36.251	1.00	31.40	C
ATOM	439	CD2	PHE	A	367	15.815	-6.869	37.988	1.00	30.54	C
ATOM	440	CE1	PHE	A	367	16.468	-5.134	35.986	1.00	24.88	C
ATOM	441	CE2	PHE	A	367	17.152	-6.598	37.722	1.00	27.58	C
ATOM	442	CZ	PHE	A	367	17.476	-5.704	36.716	1.00	26.84	C
ATOM	443	N	VAL	A	368	13.172	-9.684	38.100	1.00	32.49	N
ATOM	444	CA	VAL	A	368	13.883	-10.923	38.447	1.00	32.31	C
ATOM	445	C	VAL	A	368	13.578	-12.051	37.478	1.00	36.24	C
ATOM	446	O	VAL	A	368	14.321	-13.046	37.437	1.00	33.42	O
ATOM	447	CB	VAL	A	368	13.680	-11.377	39.901	1.00	35.22	C
ATOM	448	CG1	VAL	A	368	14.393	-10.440	40.889	1.00	35.30	C
ATOM	449	CG2	VAL	A	368	12.202	-11.506	40.251	1.00	39.26	C
ATOM	450	N	GLU	A	369	12.554	-11.897	36.643	1.00	41.05	N
ATOM	451	CA	GLU	A	369	12.216	-12.899	35.627	1.00	43.35	C
ATOM	452	C	GLU	A	369	13.059	-12.766	34.378	1.00	43.93	C
ATOM	453	O	GLU	A	369	13.077	-13.642	33.500	1.00	43.51	O
ATOM	454	CB	GLU	A	369	10.718	-12.789	35.299	1.00	44.22	C
ATOM	455	CG	GLU	A	369	9.861	-13.359	36.425	1.00	53.77	C

ATOM	456	CD	GLU	A	369	8.375	-13.179	36.203	1.00	58.72	C
ATOM	457	OE1	GLU	A	369	7.974	-12.735	35.104	1.00	61.35	O
ATOM	458	OE2	GLU	A	369	7.559	-13.460	37.111	1.00	63.00	O
ATOM	459	N	LEU	A	370	13.752	-11.636	34.229	1.00	42.33	N
ATOM	460	CA	LEU	A	370	14.641	-11.430	33.093	1.00	39.24	C
ATOM	461	C	LEU	A	370	15.821	-12.375	33.255	1.00	38.86	C
ATOM	462	O	LEU	A	370	16.080	-12.782	34.396	1.00	43.46	O
ATOM	463	CB	LEU	A	370	15.169	-9.992	33.024	1.00	38.90	C
ATOM	464	CG	LEU	A	370	14.069	-8.932	32.855	1.00	36.26	C
ATOM	465	CD1	LEU	A	370	14.661	-7.526	32.880	1.00	38.31	C
ATOM	466	CD2	LEU	A	370	13.335	-9.131	31.534	1.00	41.34	C
ATOM	467	N	SER	A	371	16.502	-12.715	32.176	1.00	41.52	N
ATOM	468	CA	SER	A	371	17.658	-13.594	32.332	1.00	39.96	C
ATOM	469	C	SER	A	371	18.720	-12.862	33.148	1.00	43.04	C
ATOM	470	O	SER	A	371	18.730	-11.620	33.243	1.00	39.51	O
ATOM	471	CB	SER	A	371	18.255	-13.899	30.955	1.00	43.12	C
ATOM	472	OG	SER	A	371	18.677	-12.649	30.419	1.00	38.32	O
ATOM	473	N	LEU	A	372	19.675	-13.612	33.675	1.00	31.82	N
ATOM	474	CA	LEU	A	372	20.754	-13.028	34.452	1.00	32.28	C
ATOM	475	C	LEU	A	372	21.563	-12.049	33.611	1.00	34.87	C
ATOM	476	O	LEU	A	372	22.098	-11.009	34.047	1.00	33.17	O
ATOM	477	CB	LEU	A	372	21.640	-14.147	34.974	1.00	38.05	C
ATOM	478	CG	LEU	A	372	22.793	-13.858	35.916	1.00	39.95	C
ATOM	479	CD1	LEU	A	372	22.273	-13.117	37.149	1.00	44.82	C
ATOM	480	CD2	LEU	A	372	23.410	-15.187	36.387	1.00	42.80	C
ATOM	481	N	PHE	A	373	21.787	-12.417	32.333	1.00	31.42	N
ATOM	482	CA	PHE	A	373	22.547	-11.511	31.483	1.00	31.42	C
ATOM	483	C	PHE	A	373	21.782	-10.220	31.250	1.00	24.19	C
ATOM	484	O	PHE	A	373	22.455	-9.193	31.101	1.00	29.66	O
ATOM	485	CB	PHE	A	373	22.926	-12.143	30.138	1.00	36.67	C
ATOM	486	CG	PHE	A	373	23.950	-13.236	30.303	1.00	43.12	C
ATOM	487	CD1	PHE	A	373	24.689	-13.358	31.467	1.00	45.48	C
ATOM	488	CD2	PHE	A	373	24.170	-14.146	29.273	1.00	46.57	C
ATOM	489	CE1	PHE	A	373	25.611	-14.378	31.619	1.00	52.03	C
ATOM	490	CE2	PHE	A	373	25.101	-15.162	29.416	1.00	49.07	C
ATOM	491	CZ	PHE	A	373	25.820	-15.266	30.584	1.00	49.72	C
ATOM	492	N	ASP	A	374	20.468	-10.304	31.152	1.00	26.27	N
ATOM	493	CA	ASP	A	374	19.704	-9.061	30.891	1.00	29.02	C
ATOM	494	C	ASP	A	374	19.705	-8.212	32.177	1.00	33.83	C
ATOM	495	O	ASP	A	374	19.921	-6.991	32.125	1.00	28.99	O
ATOM	496	CB	ASP	A	374	18.300	-9.313	30.398	1.00	32.07	C
ATOM	497	CG	ASP	A	374	18.189	-9.669	28.906	1.00	41.32	C
ATOM	498	OD1	ASP	A	374	19.188	-9.555	28.161	1.00	40.18	O
ATOM	499	OD2	ASP	A	374	17.086	-10.088	28.467	1.00	39.38	O
ATOM	500	N	GLN	A	375	19.591	-8.865	33.347	1.00	32.60	N
ATOM	501	CA	GLN	A	375	19.608	-8.071	34.583	1.00	31.64	C
ATOM	502	C	GLN	A	375	20.916	-7.333	34.726	1.00	30.67	C
ATOM	503	O	GLN	A	375	20.870	-6.138	35.028	1.00	25.21	O
ATOM	504	CB	GLN	A	375	19.352	-8.889	35.868	1.00	32.73	C
ATOM	505	CG	GLN	A	375	17.995	-9.549	35.848	1.00	26.43	C
ATOM	506	CD	GLN	A	375	17.776	-10.429	37.077	1.00	37.35	C
ATOM	507	OE1	GLN	A	375	18.178	-10.067	38.176	1.00	37.23	O
ATOM	508	NE2	GLN	A	375	17.123	-11.571	36.895	1.00	32.94	N
ATOM	509	N	VAL	A	376	22.037	-8.009	34.515	1.00	26.87	N
ATOM	510	CA	VAL	A	376	23.342	-7.387	34.620	1.00	29.51	C
ATOM	511	C	VAL	A	376	23.603	-6.347	33.546	1.00	28.83	C
ATOM	512	O	VAL	A	376	24.160	-5.246	33.774	1.00	27.40	O
ATOM	513	CB	VAL	A	376	24.406	-8.503	34.672	1.00	32.02	C
ATOM	514	CG1	VAL	A	376	25.813	-7.968	34.697	1.00	26.56	C
ATOM	515	CG2	VAL	A	376	24.140	-9.362	35.927	1.00	35.02	C
ATOM	516	N	ARG	A	377	23.206	-6.612	32.296	1.00	25.73	N
ATOM	517	CA	ARG	A	377	23.455	-5.585	31.270	1.00	27.53	C
ATOM	518	C	ARG	A	377	22.663	-4.309	31.596	1.00	23.06	C
ATOM	519	O	ARG	A	377	23.199	-3.217	31.349	1.00	25.17	O
ATOM	520	CB	ARG	A	377	23.134	-6.117	29.895	1.00	34.14	C
ATOM	521	CG	ARG	A	377	21.735	-5.910	29.433	1.00	40.47	C
ATOM	522	CD	ARG	A	377	21.572	-5.937	27.920	1.00	48.13	C
ATOM	523	NE	ARG	A	377	20.220	-6.455	27.686	1.00	45.66	N
ATOM	524	CZ	ARG	A	377	19.401	-5.929	26.796	1.00	53.53	C
ATOM	525	NH1	ARG	A	377	18.208	-6.486	26.676	1.00	51.20	N
ATOM	526	NH2	ARG	A	377	19.793	-4.873	26.093	1.00	55.56	N
ATOM	527	N	LEU	A	378	21.418	-4.443	31.991	1.00	22.82	N
ATOM	528	CA	LEU	A	378	20.599	-3.260	32.361	1.00	22.74	C
ATOM	529	C	LEU	A	378	21.273	-2.443	33.483	1.00	20.13	C
ATOM	530	O	LEU	A	378	21.502	-1.230	33.334	1.00	24.01	O
ATOM	531	CB	LEU	A	378	19.172	-3.599	32.766	1.00	21.48	C
ATOM	532	CG	LEU	A	378	18.322	-4.303	31.691	1.00	26.61	C

ATOM	533	CD1	LEU	A	378	16.974	-4.747	32.179	1.00	25.18	C
ATOM	534	CD2	LEU	A	378	18.156	-3.326	30.516	1.00	26.44	C
ATOM	535	N	LEU	A	379	21.623	-3.098	34.582	1.00	23.21	N
ATOM	536	CA	LEU	A	379	22.258	-2.379	35.694	1.00	23.26	C
ATOM	537	C	LEU	A	379	23.589	-1.746	35.352	1.00	24.40	C
ATOM	538	O	LEU	A	379	23.889	-0.596	35.669	1.00	21.75	O
ATOM	539	CB	LEU	A	379	22.463	-3.314	36.893	1.00	20.84	C
ATOM	540	CG	LEU	A	379	21.188	-3.651	37.669	1.00	24.99	C
ATOM	541	CD1	LEU	A	379	21.460	-4.962	38.405	1.00	24.61	C
ATOM	542	CD2	LEU	A	379	20.694	-2.570	38.597	1.00	27.69	C
ATOM	543	N	GLU	A	380	24.415	-2.461	34.539	1.00	24.06	N
ATOM	544	CA	GLU	A	380	25.714	-1.922	34.173	1.00	25.95	C
ATOM	545	C	GLU	A	380	25.571	-0.678	33.311	1.00	25.00	C
ATOM	546	O	GLU	A	380	26.337	0.267	33.415	1.00	27.21	O
ATOM	547	CB	GLU	A	380	26.467	-3.046	33.416	1.00	35.58	C
ATOM	548	CG	GLU	A	380	27.815	-2.632	32.866	1.00	43.85	C
ATOM	549	CD	GLU	A	380	28.719	-2.197	34.012	1.00	50.26	C
ATOM	550	OE1	GLU	A	380	29.012	-2.992	34.923	1.00	50.00	O
ATOM	551	OE2	GLU	A	380	29.079	-1.015	33.949	1.00	52.17	O
ATOM	552	N	SER	A	381	24.559	-0.692	32.421	1.00	22.96	N
ATOM	553	CA	SER	A	381	24.391	0.472	31.597	1.00	20.93	C
ATOM	554	C	SER	A	381	23.796	1.718	32.260	1.00	22.00	C
ATOM	555	O	SER	A	381	24.076	2.802	31.757	1.00	25.94	O
ATOM	556	CB	SER	A	381	23.427	0.135	30.443	1.00	26.35	C
ATOM	557	OG	SER	A	381	23.369	1.319	29.665	1.00	41.12	O
ATOM	558	N	CYS	A	382	22.991	1.574	33.279	1.00	19.49	N
ATOM	559	CA	CYS	A	382	22.268	2.746	33.789	1.00	20.72	C
ATOM	560	C	CYS	A	382	22.649	3.184	35.179	1.00	20.55	C
ATOM	561	O	CYS	A	382	22.032	4.173	35.591	1.00	18.26	O
ATOM	562	CB	CYS	A	382	20.784	2.232	33.926	1.00	20.19	C
ATOM	563	SG	CYS	A	382	20.419	1.235	35.363	1.00	23.70	S
ATOM	564	N	TRP	A	383	23.692	2.615	35.831	1.00	16.62	N
ATOM	565	CA	TRP	A	383	23.714	2.980	37.265	1.00	17.45	C
ATOM	566	C	TRP	A	383	24.047	4.435	37.510	1.00	17.92	C
ATOM	567	O	TRP	A	383	23.395	5.063	38.383	1.00	17.80	O
ATOM	568	CB	TRP	A	383	24.667	2.020	38.033	1.00	18.03	C
ATOM	569	CG	TRP	A	383	26.081	2.031	37.564	1.00	20.65	C
ATOM	570	CD1	TRP	A	383	26.642	1.181	36.616	1.00	18.50	C
ATOM	571	CD2	TRP	A	383	27.125	2.928	37.985	1.00	18.96	C
ATOM	572	NE1	TRP	A	383	27.979	1.540	36.470	1.00	19.72	N
ATOM	573	CE2	TRP	A	383	28.293	2.585	37.289	1.00	22.08	C
ATOM	574	CE3	TRP	A	383	27.160	4.002	38.915	1.00	18.46	C
ATOM	575	CZ2	TRP	A	383	29.484	3.321	37.430	1.00	22.38	C
ATOM	576	CZ3	TRP	A	383	28.309	4.725	39.045	1.00	22.44	C
ATOM	577	CH2	TRP	A	383	29.483	4.358	38.328	1.00	23.23	C
ATOM	578	N	MET	A	384	24.955	5.020	36.711	1.00	14.97	N
ATOM	579	CA	MET	A	384	25.254	6.450	37.001	1.00	15.11	C
ATOM	580	C	MET	A	384	24.024	7.290	36.691	1.00	16.51	C
ATOM	581	O	MET	A	384	23.729	8.291	37.354	1.00	14.18	O
ATOM	582	CB	MET	A	384	26.519	6.912	36.267	1.00	20.28	C
ATOM	583	CG	MET	A	384	26.749	8.399	36.546	1.00	19.66	C
ATOM	584	SD	MET	A	384	27.340	8.718	38.232	1.00	19.34	S
ATOM	585	CE	MET	A	384	29.061	8.231	38.081	1.00	19.18	C
ATOM	586	N	GLU	A	385	23.271	6.910	35.638	1.00	14.74	N
ATOM	587	CA	GLU	A	385	22.051	7.674	35.297	1.00	15.30	C
ATOM	588	C	GLU	A	385	20.996	7.593	36.411	1.00	15.06	C
ATOM	589	O	GLU	A	385	20.308	8.573	36.682	1.00	16.82	O
ATOM	590	CB	GLU	A	385	21.445	7.258	33.915	1.00	18.49	C
ATOM	591	CG	GLU	A	385	20.565	8.409	33.347	1.00	21.96	C
ATOM	592	CD	GLU	A	385	19.946	8.069	32.000	1.00	29.86	C
ATOM	593	OE1	GLU	A	385	20.470	7.169	31.267	1.00	21.88	O
ATOM	594	OE2	GLU	A	385	18.913	8.711	31.676	1.00	30.28	O
ATOM	595	N	VAL	A	386	20.846	6.400	36.972	1.00	16.06	N
ATOM	596	CA	VAL	A	386	19.838	6.276	38.070	1.00	15.50	C
ATOM	597	C	VAL	A	386	20.265	7.075	39.250	1.00	16.51	C
ATOM	598	O	VAL	A	386	19.470	7.747	39.926	1.00	17.88	O
ATOM	599	CB	VAL	A	386	19.719	4.793	38.408	1.00	15.13	C
ATOM	600	CG1	VAL	A	386	18.872	4.559	39.647	1.00	17.57	C
ATOM	601	CG2	VAL	A	386	19.005	4.159	37.192	1.00	20.15	C
ATOM	602	N	LEU	A	387	21.573	6.938	39.608	1.00	14.70	N
ATOM	603	CA	LEU	A	387	22.059	7.752	40.744	1.00	15.55	C
ATOM	604	C	LEU	A	387	21.773	9.225	40.466	1.00	15.84	C
ATOM	605	O	LEU	A	387	21.360	9.916	41.401	1.00	19.29	O
ATOM	606	CB	LEU	A	387	23.592	7.579	40.850	1.00	14.14	C
ATOM	607	CG	LEU	A	387	24.058	6.259	41.474	1.00	15.59	C
ATOM	608	CD1	LEU	A	387	25.617	6.319	41.591	1.00	16.49	C
ATOM	609	CD2	LEU	A	387	23.356	5.939	42.802	1.00	19.80	C

ATOM	610	N	MET	A	388	22.057	9.734	39.250	1.00	14.43	N
ATOM	611	CA	MET	A	388	21.900	11.185	39.019	1.00	15.37	C
ATOM	612	C	MET	A	388	20.447	11.580	38.940	1.00	15.03	C
ATOM	613	O	MET	A	388	20.058	12.648	39.466	1.00	16.31	O
ATOM	614	CB	MET	A	388	22.598	11.558	37.691	1.00	13.28	C
ATOM	615	CG	MET	A	388	24.134	11.508	37.914	1.00	16.22	C
ATOM	616	SD	MET	A	388	24.930	12.007	36.345	1.00	15.49	S
ATOM	617	CE	MET	A	388	26.537	12.485	36.996	1.00	17.90	C
ATOM	618	N	MET	A	389	19.617	10.631	38.473	1.00	12.07	N
ATOM	619	CA	MET	A	389	18.131	10.977	38.496	1.00	16.42	C
ATOM	620	C	MET	A	389	17.675	11.200	39.947	1.00	18.92	C
ATOM	621	O	MET	A	389	16.902	12.135	40.261	1.00	17.10	O
ATOM	622	CB	MET	A	389	17.327	9.898	37.804	1.00	16.48	C
ATOM	623	CG	MET	A	389	15.804	10.185	37.609	1.00	20.74	C
ATOM	624	SD	MET	A	389	15.549	11.620	36.521	1.00	21.26	S
ATOM	625	CE	MET	A	389	14.006	12.304	37.143	1.00	31.58	C
ATOM	626	N	GLY	A	390	18.124	10.306	40.839	1.00	19.95	N
ATOM	627	CA	GLY	A	390	17.755	10.442	42.274	1.00	19.62	C
ATOM	628	C	GLY	A	390	18.298	11.763	42.831	1.00	24.49	C
ATOM	629	O	GLY	A	390	17.603	12.480	43.574	1.00	21.09	O
ATOM	630	N	LEU	A	391	19.539	12.120	42.484	1.00	17.24	N
ATOM	631	CA	LEU	A	391	20.106	13.363	42.942	1.00	18.33	C
ATOM	632	C	LEU	A	391	19.252	14.546	42.476	1.00	18.46	C
ATOM	633	O	LEU	A	391	19.054	15.541	43.203	1.00	19.59	O
ATOM	634	CB	LEU	A	391	21.505	13.511	42.329	1.00	15.42	C
ATOM	635	CG	LEU	A	391	22.244	14.833	42.480	1.00	15.46	C
ATOM	636	CD1	LEU	A	391	22.499	15.155	43.968	1.00	23.19	C
ATOM	637	CD2	LEU	A	391	23.600	14.728	41.777	1.00	17.31	C
ATOM	638	N	MET	A	392	18.862	14.513	41.199	1.00	15.68	N
ATOM	639	CA	MET	A	392	18.091	15.642	40.650	1.00	18.68	C
ATOM	640	C	MET	A	392	16.770	15.763	41.383	1.00	20.62	C
ATOM	641	O	MET	A	392	16.405	16.876	41.784	1.00	19.69	O
ATOM	642	CB	MET	A	392	17.873	15.414	39.153	1.00	19.75	C
ATOM	643	CG	MET	A	392	19.179	15.445	38.372	1.00	22.97	C
ATOM	644	SD	MET	A	392	18.739	15.196	36.596	1.00	24.98	S
ATOM	645	CE	MET	A	392	20.397	15.422	35.940	1.00	25.59	C
ATOM	646	N	TRP	A	393	16.113	14.616	41.589	1.00	18.58	N
ATOM	647	CA	TRP	A	393	14.877	14.673	42.386	1.00	24.71	C
ATOM	648	C	TRP	A	393	15.124	15.209	43.802	1.00	26.53	C
ATOM	649	O	TRP	A	393	14.279	16.016	44.283	1.00	25.74	O
ATOM	650	CB	TRP	A	393	14.243	13.287	42.476	1.00	21.18	C
ATOM	651	CG	TRP	A	393	13.059	13.235	43.404	1.00	24.40	C
ATOM	652	CD1	TRP	A	393	13.005	12.632	44.621	1.00	27.20	C
ATOM	653	CD2	TRP	A	393	11.776	13.838	43.164	1.00	25.32	C
ATOM	654	NE1	TRP	A	393	11.746	12.830	45.186	1.00	26.38	N
ATOM	655	CE2	TRP	A	393	10.993	13.572	44.304	1.00	26.02	C
ATOM	656	CE3	TRP	A	393	11.232	14.584	42.116	1.00	24.98	C
ATOM	657	CZ2	TRP	A	393	9.671	14.005	44.408	1.00	26.15	C
ATOM	658	CZ3	TRP	A	393	9.879	15.004	42.195	1.00	26.45	C
ATOM	659	CH2	TRP	A	393	9.148	14.720	43.368	1.00	28.96	C
ATOM	660	N	ARG	A	394	16.175	14.790	44.508	1.00	21.62	N
ATOM	661	CA	ARG	A	394	16.427	15.299	45.869	1.00	20.86	C
ATOM	662	C	ARG	A	394	16.740	16.786	45.833	1.00	24.67	C
ATOM	663	O	ARG	A	394	16.496	17.528	46.796	1.00	23.01	O
ATOM	664	CB	ARG	A	394	17.623	14.563	46.533	1.00	18.23	C
ATOM	665	CG	ARG	A	394	17.184	13.127	46.915	1.00	22.23	C
ATOM	666	CD	ARG	A	394	18.268	12.424	47.731	1.00	21.34	C
ATOM	667	NE	ARG	A	394	19.583	12.406	47.096	1.00	22.33	N
ATOM	668	CZ	ARG	A	394	19.990	11.465	46.204	1.00	18.45	C
ATOM	669	NH1	ARG	A	394	19.128	10.506	45.872	1.00	19.75	N
ATOM	670	NH2	ARG	A	394	21.240	11.562	45.776	1.00	19.94	N
ATOM	671	N	SER	A	395	17.255	17.320	44.742	1.00	21.15	N
ATOM	672	CA	SER	A	395	17.635	18.714	44.635	1.00	21.44	C
ATOM	673	C	SER	A	395	16.584	19.641	44.025	1.00	19.15	C
ATOM	674	O	SER	A	395	16.879	20.820	43.832	1.00	23.10	O
ATOM	675	CB	SER	A	395	18.892	18.684	43.718	1.00	18.04	C
ATOM	676	OG	SER	A	395	19.875	17.836	44.335	1.00	18.21	O
ATOM	677	N	ILE	A	396	15.440	19.141	43.684	1.00	19.81	N
ATOM	678	CA	ILE	A	396	14.453	19.950	42.942	1.00	24.62	C
ATOM	679	C	ILE	A	396	14.005	21.237	43.614	1.00	27.35	C
ATOM	680	O	ILE	A	396	13.937	22.268	42.954	1.00	28.08	O
ATOM	681	CB	ILE	A	396	13.332	18.975	42.576	1.00	31.97	C
ATOM	682	CG1	ILE	A	396	12.714	19.384	41.243	1.00	35.67	C
ATOM	683	CG2	ILE	A	396	12.331	18.782	43.701	1.00	34.39	C
ATOM	684	CD1	ILE	A	396	11.807	18.343	40.594	1.00	31.62	C
ATOM	685	N	ASP	A	397	13.775	21.172	44.899	1.00	27.38	N
ATOM	686	CA	ASP	A	397	13.317	22.305	45.726	1.00	30.34	C

ATOM	687	C	ASP	A	397	14.462	23.046	46.363	1.00	33.09	C
ATOM	688	O	ASP	A	397	14.280	23.798	47.336	1.00	33.75	O
ATOM	689	CB	ASP	A	397	12.426	21.706	46.827	1.00	31.40	C
ATOM	690	CG	ASP	A	397	11.165	21.107	46.262	1.00	34.81	C
ATOM	691	OD1	ASP	A	397	10.711	21.642	45.238	1.00	36.72	O
ATOM	692	OD2	ASP	A	397	10.636	20.123	46.799	1.00	42.07	O
ATOM	693	N	HIS	A	398	15.690	22.885	45.876	1.00	26.91	N
ATOM	694	CA	HIS	A	398	16.869	23.510	46.427	1.00	31.70	C
ATOM	695	C	HIS	A	398	17.772	24.132	45.405	1.00	27.69	C
ATOM	696	O	HIS	A	398	18.930	23.699	45.195	1.00	31.30	O
ATOM	697	CB	HIS	A	398	17.627	22.505	47.331	1.00	32.19	C
ATOM	698	CG	HIS	A	398	16.875	21.918	48.488	1.00	35.05	C
ATOM	699	ND1	HIS	A	398	16.304	20.677	48.504	1.00	33.32	N
ATOM	700	CD2	HIS	A	398	16.575	22.452	49.696	1.00	30.34	C
ATOM	701	CE1	HIS	A	398	15.690	20.447	49.661	1.00	34.45	C
ATOM	702	NE2	HIS	A	398	15.853	21.527	50.409	1.00	37.51	N
ATOM	703	N	PRO	A	399	17.345	25.183	44.713	1.00	33.73	N
ATOM	704	CA	PRO	A	399	18.144	25.898	43.752	1.00	29.82	C
ATOM	705	C	PRO	A	399	19.549	26.216	44.223	1.00	33.25	C
ATOM	706	O	PRO	A	399	19.766	26.630	45.365	1.00	33.94	O
ATOM	707	CB	PRO	A	399	17.431	27.225	43.481	1.00	34.26	C
ATOM	708	CG	PRO	A	399	16.273	27.257	44.391	1.00	34.08	C
ATOM	709	CD	PRO	A	399	16.032	25.857	44.891	1.00	33.97	C
ATOM	710	N	GLY	A	400	20.500	25.996	43.336	1.00	28.90	N
ATOM	711	CA	GLY	A	400	21.921	26.254	43.561	1.00	29.24	C
ATOM	712	C	GLY	A	400	22.590	25.173	44.418	1.00	25.18	C
ATOM	713	O	GLY	A	400	23.787	25.298	44.704	1.00	27.24	O
ATOM	714	N	LYS	A	401	21.860	24.150	44.863	1.00	25.56	N
ATOM	715	CA	LYS	A	401	22.470	23.122	45.672	1.00	26.68	C
ATOM	716	C	LYS	A	401	22.286	21.688	45.064	1.00	20.20	C
ATOM	717	O	LYS	A	401	21.296	21.465	44.391	1.00	24.95	O
ATOM	718	CB	LYS	A	401	21.635	22.912	46.955	1.00	30.94	C
ATOM	719	CG	LYS	A	401	21.844	23.694	48.203	1.00	43.57	C
ATOM	720	CD	LYS	A	401	22.115	25.154	48.045	1.00	45.37	C
ATOM	721	CE	LYS	A	401	22.201	25.882	49.389	1.00	48.67	C
ATOM	722	NZ	LYS	A	401	20.883	26.446	49.784	1.00	51.08	N
ATOM	723	N	LEU	A	402	23.267	20.878	45.374	1.00	20.86	N
ATOM	724	CA	LEU	A	402	23.112	19.446	44.987	1.00	22.31	C
ATOM	725	C	LEU	A	402	22.957	18.664	46.275	1.00	21.03	C
ATOM	726	O	LEU	A	402	23.914	18.555	47.078	1.00	19.86	O
ATOM	727	CB	LEU	A	402	24.288	19.025	44.112	1.00	18.88	C
ATOM	728	CG	LEU	A	402	24.207	19.596	42.679	1.00	20.75	C
ATOM	729	CD1	LEU	A	402	25.487	19.208	41.954	1.00	23.26	C
ATOM	730	CD2	LEU	A	402	23.011	19.057	41.840	1.00	22.84	C
ATOM	731	N	ILE	A	403	21.760	18.072	46.414	1.00	19.33	N
ATOM	732	CA	ILE	A	403	21.468	17.280	47.619	1.00	19.55	C
ATOM	733	C	ILE	A	403	21.916	15.809	47.407	1.00	20.88	C
ATOM	734	O	ILE	A	403	21.112	14.947	47.151	1.00	20.74	O
ATOM	735	CB	ILE	A	403	20.006	17.287	48.022	1.00	20.45	C
ATOM	736	CG1	ILE	A	403	19.419	18.695	48.148	1.00	28.69	C
ATOM	737	CG2	ILE	A	403	19.785	16.535	49.355	1.00	25.33	C
ATOM	738	CD1	ILE	A	403	20.234	19.713	48.883	1.00	32.71	C
ATOM	739	N	PHE	A	404	23.216	15.587	47.603	1.00	22.57	N
ATOM	740	CA	PHE	A	404	23.745	14.250	47.395	1.00	23.38	C
ATOM	741	C	PHE	A	404	23.132	13.275	48.383	1.00	23.34	C
ATOM	742	O	PHE	A	404	22.779	12.120	48.095	1.00	23.60	O
ATOM	743	CB	PHE	A	404	25.284	14.338	47.413	1.00	21.32	C
ATOM	744	CG	PHE	A	404	25.845	14.745	46.053	1.00	22.32	C
ATOM	745	CD1	PHE	A	404	26.195	16.065	45.825	1.00	20.75	C
ATOM	746	CD2	PHE	A	404	26.003	13.816	45.024	1.00	21.33	C
ATOM	747	CE1	PHE	A	404	26.704	16.480	44.603	1.00	19.07	C
ATOM	748	CE2	PHE	A	404	26.479	14.227	43.802	1.00	20.69	C
ATOM	749	CZ	PHE	A	404	26.871	15.550	43.573	1.00	20.96	C
ATOM	750	N	ALA	A	405	23.051	13.741	49.614	1.00	23.85	N
ATOM	751	CA	ALA	A	405	22.409	13.027	50.715	1.00	26.71	C
ATOM	752	C	ALA	A	405	21.900	14.100	51.676	1.00	28.50	C
ATOM	753	O	ALA	A	405	22.384	15.235	51.720	1.00	25.10	O
ATOM	754	CB	ALA	A	405	23.337	12.063	51.417	1.00	25.68	C
ATOM	755	N	PRO	A	406	20.986	13.724	52.568	1.00	32.52	N
ATOM	756	CA	PRO	A	406	20.427	14.651	53.539	1.00	37.50	C
ATOM	757	C	PRO	A	406	21.459	15.439	54.322	1.00	34.45	C
ATOM	758	O	PRO	A	406	21.222	16.618	54.615	1.00	34.95	O
ATOM	759	CB	PRO	A	406	19.464	13.803	54.362	1.00	37.05	C
ATOM	760	CG	PRO	A	406	19.075	12.711	53.424	1.00	35.58	C
ATOM	761	CD	PRO	A	406	20.321	12.409	52.623	1.00	35.62	C
ATOM	762	N	ASP	A	407	22.589	14.836	54.642	1.00	36.25	N
ATOM	763	CA	ASP	A	407	23.669	15.532	55.325	1.00	37.74	C

ATOM	764	C	ASP	A	407	24.942	15.713	54.485	1.00	35.68	C
ATOM	765	O	ASP	A	407	26.067	15.939	54.972	1.00	35.16	O
ATOM	766	CB	ASP	A	407	23.951	14.837	56.658	1.00	45.22	C
ATOM	767	CG	ASP	A	407	24.683	15.756	57.615	1.00	51.47	C
ATOM	768	OD1	ASP	A	407	24.752	16.972	57.337	1.00	53.42	O
ATOM	769	OD2	ASP	A	407	25.206	15.264	58.640	1.00	56.11	O
ATOM	770	N	LEU	A	408	24.780	15.623	53.155	1.00	31.91	N
ATOM	771	CA	LEU	A	408	25.846	15.841	52.181	1.00	28.65	C
ATOM	772	C	LEU	A	408	25.291	16.787	51.117	1.00	33.12	C
ATOM	773	O	LEU	A	408	24.960	16.416	49.990	1.00	29.33	O
ATOM	774	CB	LEU	A	408	26.393	14.590	51.522	1.00	31.43	C
ATOM	775	CG	LEU	A	408	27.607	14.813	50.592	1.00	33.95	C
ATOM	776	CD1	LEU	A	408	28.719	15.544	51.340	1.00	38.24	C
ATOM	777	CD2	LEU	A	408	28.093	13.493	50.021	1.00	35.82	C
ATOM	778	N	VAL	A	409	25.111	18.046	51.500	1.00	28.59	N
ATOM	779	CA	VAL	A	409	24.521	19.044	50.608	1.00	29.53	C
ATOM	780	C	VAL	A	409	25.595	19.925	50.021	1.00	35.26	C
ATOM	781	O	VAL	A	409	26.304	20.606	50.769	1.00	37.91	O
ATOM	782	CB	VAL	A	409	23.498	19.864	51.412	1.00	32.96	C
ATOM	783	CG1	VAL	A	409	22.890	20.993	50.603	1.00	31.95	C
ATOM	784	CG2	VAL	A	409	22.430	18.950	51.974	1.00	30.22	C
ATOM	785	N	LEU	A	410	25.821	19.922	48.706	1.00	27.77	N
ATOM	786	CA	LEU	A	410	26.842	20.773	48.118	1.00	28.83	C
ATOM	787	C	LEU	A	410	26.298	22.004	47.435	1.00	36.39	C
ATOM	788	O	LEU	A	410	25.299	21.967	46.711	1.00	30.29	O
ATOM	789	CB	LEU	A	410	27.768	20.016	47.156	1.00	32.95	C
ATOM	790	CG	LEU	A	410	28.396	18.710	47.612	1.00	36.56	C
ATOM	791	CD1	LEU	A	410	29.505	18.242	46.683	1.00	34.98	C
ATOM	792	CD2	LEU	A	410	28.902	18.749	49.045	1.00	41.39	C
ATOM	793	N	ASP	A	411	26.938	23.164	47.686	1.00	33.11	N
ATOM	794	CA	ASP	A	411	26.539	24.350	46.933	1.00	34.05	C
ATOM	795	C	ASP	A	411	27.299	24.255	45.600	1.00	29.65	C
ATOM	796	O	ASP	A	411	28.419	23.727	45.543	1.00	30.84	O
ATOM	797	CB	ASP	A	411	26.884	25.698	47.590	1.00	41.04	C
ATOM	798	CG	ASP	A	411	25.865	26.016	48.674	1.00	49.46	C
ATOM	799	OD1	ASP	A	411	25.986	25.474	49.792	1.00	56.56	O
ATOM	800	OD2	ASP	A	411	24.919	26.778	48.410	1.00	55.40	O
ATOM	801	N	ARG	A	412	26.745	24.819	44.558	1.00	31.76	N
ATOM	802	CA	ARG	A	412	27.345	24.827	43.227	1.00	29.21	C
ATOM	803	C	ARG	A	412	28.814	25.148	43.185	1.00	32.15	C
ATOM	804	O	ARG	A	412	29.634	24.412	42.643	1.00	31.27	O
ATOM	805	CB	ARG	A	412	26.552	25.852	42.363	1.00	32.70	C
ATOM	806	CG	ARG	A	412	27.039	25.878	40.919	1.00	36.94	C
ATOM	807	CD	ARG	A	412	28.132	26.912	40.680	1.00	42.09	C
ATOM	808	NE	ARG	A	412	28.493	26.982	39.276	1.00	40.17	N
ATOM	809	CZ	ARG	A	412	29.542	27.671	38.812	1.00	45.07	C
ATOM	810	NH1	ARG	A	412	29.784	27.654	37.497	1.00	38.97	N
ATOM	811	NH2	ARG	A	412	30.303	28.339	39.683	1.00	37.08	N
ATOM	812	N	ASP	A	413	29.233	26.262	43.809	1.00	34.93	N
ATOM	813	CA	ASP	A	413	30.622	26.701	43.828	1.00	40.84	C
ATOM	814	C	ASP	A	413	31.593	25.749	44.469	1.00	36.09	C
ATOM	815	O	ASP	A	413	32.796	25.792	44.201	1.00	37.87	O
ATOM	816	CB	ASP	A	413	30.740	28.092	44.465	1.00	46.18	C
ATOM	817	CG	ASP	A	413	30.199	29.197	43.580	1.00	51.56	C
ATOM	818	OD1	ASP	A	413	30.090	29.017	42.345	1.00	54.10	O
ATOM	819	OD2	ASP	A	413	29.872	30.278	44.130	1.00	53.78	O
ATOM	820	N	GLU	A	414	31.171	24.776	45.271	1.00	36.43	N
ATOM	821	CA	GLU	A	414	32.096	23.800	45.838	1.00	33.20	C
ATOM	822	C	GLU	A	414	32.628	22.891	44.742	1.00	35.36	C
ATOM	823	O	GLU	A	414	33.644	22.235	44.932	1.00	40.36	O
ATOM	824	CB	GLU	A	414	31.491	23.040	46.993	1.00	38.12	C
ATOM	825	CG	GLU	A	414	30.691	24.000	47.892	1.00	41.60	C
ATOM	826	CD	GLU	A	414	30.377	23.195	49.151	1.00	42.56	C
ATOM	827	OE1	GLU	A	414	29.182	23.012	49.394	1.00	39.90	O
ATOM	828	OE2	GLU	A	414	31.360	22.790	49.793	1.00	44.66	O
ATOM	829	N	GLY	A	415	32.085	22.926	43.536	1.00	34.58	N
ATOM	830	CA	GLY	A	415	32.610	22.195	42.395	1.00	35.34	C
ATOM	831	C	GLY	A	415	34.002	22.657	41.995	1.00	36.70	C
ATOM	832	O	GLY	A	415	34.711	22.005	41.201	1.00	32.74	O
ATOM	833	N	LYS	A	416	34.448	23.846	42.442	1.00	35.48	N
ATOM	834	CA	LYS	A	416	35.776	24.340	42.108	1.00	35.85	C
ATOM	835	C	LYS	A	416	36.869	23.525	42.794	1.00	37.60	C
ATOM	836	O	LYS	A	416	38.023	23.520	42.370	1.00	35.22	O
ATOM	837	CB	LYS	A	416	35.874	25.827	42.441	1.00	38.97	C
ATOM	838	CG	LYS	A	416	34.861	26.691	41.670	1.00	47.16	C
ATOM	839	CD	LYS	A	416	34.985	28.160	42.065	1.00	52.82	C
ATOM	840	CE	LYS	A	416	33.891	29.049	41.509	1.00	54.67	C

ATOM	841	NZ	LYS	A	416	34.253	29.728	40.235	1.00	61.17	N
ATOM	842	N	CYS	A	417	36.549	22.700	43.777	1.00	37.57	N
ATOM	843	CA	CYS	A	417	37.456	21.852	44.507	1.00	39.44	C
ATOM	844	C	CYS	A	417	38.026	20.726	43.662	1.00	39.18	C
ATOM	845	O	CYS	A	417	39.158	20.251	43.845	1.00	40.72	O
ATOM	846	CB	CYS	A	417	36.732	21.280	45.758	1.00	41.41	C
ATOM	847	SG	CYS	A	417	35.889	22.509	46.822	1.00	49.13	S
ATOM	848	N	VAL	A	418	37.259	20.203	42.698	1.00	36.06	N
ATOM	849	CA	VAL	A	418	37.639	19.067	41.878	1.00	31.96	C
ATOM	850	C	VAL	A	418	37.823	19.509	40.426	1.00	29.98	C
ATOM	851	O	VAL	A	418	36.963	20.136	39.835	1.00	29.54	O
ATOM	852	CB	VAL	A	418	36.607	17.916	41.954	1.00	24.72	C
ATOM	853	CG1	VAL	A	418	37.056	16.721	41.120	1.00	28.34	C
ATOM	854	CG2	VAL	A	418	36.491	17.385	43.376	1.00	27.69	C
ATOM	855	N	GLU	A	419	38.996	19.260	39.852	1.00	30.53	N
ATOM	856	CA	GLU	A	419	39.222	19.705	38.486	1.00	27.70	C
ATOM	857	C	GLU	A	419	38.127	19.138	37.565	1.00	28.75	C
ATOM	858	O	GLU	A	419	37.973	17.920	37.644	1.00	25.87	O
ATOM	859	CB	GLU	A	419	40.567	19.171	38.008	1.00	32.23	C
ATOM	860	CG	GLU	A	419	40.880	19.646	36.586	1.00	40.70	C
ATOM	861	CD	GLU	A	419	42.378	19.766	36.390	1.00	49.13	C
ATOM	862	OE1	GLU	A	419	43.197	19.569	37.319	1.00	54.26	O
ATOM	863	OE2	GLU	A	419	42.768	20.087	35.253	1.00	53.59	O
ATOM	864	N	GLY	A	420	37.466	19.950	36.778	1.00	31.18	N
ATOM	865	CA	GLY	A	420	36.492	19.450	35.807	1.00	27.93	C
ATOM	866	C	GLY	A	420	35.122	19.080	36.355	1.00	33.09	C
ATOM	867	O	GLY	A	420	34.249	18.794	35.504	1.00	28.63	O
ATOM	868	N	ILE	A	421	34.902	19.073	37.666	1.00	24.94	N
ATOM	869	CA	ILE	A	421	33.550	18.669	38.126	1.00	29.80	C
ATOM	870	C	ILE	A	421	32.517	19.771	38.086	1.00	28.97	C
ATOM	871	O	ILE	A	421	31.279	19.623	38.123	1.00	25.14	O
ATOM	872	CB	ILE	A	421	33.628	18.004	39.500	1.00	27.62	C
ATOM	873	CG1	ILE	A	421	32.670	16.788	39.594	1.00	24.09	C
ATOM	874	CG2	ILE	A	421	33.307	19.021	40.589	1.00	25.66	C
ATOM	875	CD1	ILE	A	421	32.796	16.062	40.920	1.00	26.64	C
ATOM	876	N	LEU	A	422	32.974	21.033	38.058	1.00	29.20	N
ATOM	877	CA	LEU	A	422	32.064	22.151	37.994	1.00	29.02	C
ATOM	878	C	LEU	A	422	31.130	22.047	36.786	1.00	28.10	C
ATOM	879	O	LEU	A	422	29.936	22.370	36.938	1.00	26.46	O
ATOM	880	CB	LEU	A	422	32.832	23.474	37.990	1.00	34.57	C
ATOM	881	CG	LEU	A	422	32.019	24.681	38.416	1.00	40.29	C
ATOM	882	CD1	LEU	A	422	31.516	24.495	39.849	1.00	31.88	C
ATOM	883	CD2	LEU	A	422	32.838	25.975	38.252	1.00	39.46	C
ATOM	884	N	GLU	A	423	31.671	21.647	35.639	1.00	25.58	N
ATOM	885	CA	GLU	A	423	30.835	21.486	34.431	1.00	29.62	C
ATOM	886	C	GLU	A	423	29.725	20.452	34.679	1.00	28.25	C
ATOM	887	O	GLU	A	423	28.595	20.664	34.252	1.00	27.19	O
ATOM	888	CB	GLU	A	423	31.726	20.974	33.267	1.00	34.04	C
ATOM	889	CG	GLU	A	423	31.029	20.644	31.973	1.00	44.60	C
ATOM	890	CD	GLU	A	423	31.782	19.973	30.850	1.00	50.42	C
ATOM	891	OE1	GLU	A	423	32.943	19.506	30.965	1.00	51.43	O
ATOM	892	OE2	GLU	A	423	31.182	19.846	29.747	1.00	55.11	O
ATOM	893	N	ILE	A	424	30.100	19.371	35.348	1.00	22.70	N
ATOM	894	CA	ILE	A	424	29.183	18.289	35.705	1.00	20.28	C
ATOM	895	C	ILE	A	424	28.161	18.831	36.706	1.00	20.01	C
ATOM	896	O	ILE	A	424	26.968	18.612	36.533	1.00	18.93	O
ATOM	897	CB	ILE	A	424	29.908	17.079	36.296	1.00	20.86	C
ATOM	898	CG1	ILE	A	424	31.091	16.538	35.477	1.00	26.56	C
ATOM	899	CG2	ILE	A	424	28.909	15.958	36.559	1.00	19.58	C
ATOM	900	CD1	ILE	A	424	30.837	16.382	34.004	1.00	32.30	C
ATOM	901	N	PHE	A	425	28.572	19.625	37.705	1.00	21.17	N
ATOM	902	CA	PHE	A	425	27.563	20.165	38.618	1.00	22.12	C
ATOM	903	C	PHE	A	425	26.562	21.060	37.921	1.00	23.84	C
ATOM	904	O	PHE	A	425	25.358	21.088	38.232	1.00	20.50	O
ATOM	905	CB	PHE	A	425	28.265	20.943	39.744	1.00	22.81	C
ATOM	906	CG	PHE	A	425	28.866	20.061	40.816	1.00	24.91	C
ATOM	907	CD1	PHE	A	425	28.974	18.689	40.724	1.00	20.45	C
ATOM	908	CD2	PHE	A	425	29.312	20.649	41.986	1.00	24.78	C
ATOM	909	CE1	PHE	A	425	29.536	17.906	41.701	1.00	22.48	C
ATOM	910	CE2	PHE	A	425	29.849	19.888	42.999	1.00	26.28	C
ATOM	911	CZ	PHE	A	425	29.958	18.527	42.866	1.00	28.92	C
ATOM	912	N	ASP	A	426	27.088	21.901	37.013	1.00	24.52	N
ATOM	913	CA	ASP	A	426	26.215	22.841	36.274	1.00	24.95	C
ATOM	914	C	ASP	A	426	25.206	22.084	35.406	1.00	24.85	C
ATOM	915	O	ASP	A	426	24.035	22.490	35.318	1.00	26.21	O
ATOM	916	CB	ASP	A	426	27.115	23.764	35.443	1.00	24.42	C
ATOM	917	CG	ASP	A	426	27.712	24.875	36.299	1.00	31.66	C

ATOM	918	OD1	ASP	A	426	27.244	25.208	37.405	1.00	32.79	O
ATOM	919	OD2	ASP	A	426	28.716	25.431	35.813	1.00	32.76	O
ATOM	920	N	MET	A	427	25.653	21.005	34.757	1.00	22.59	N
ATOM	921	CA	MET	A	427	24.719	20.177	33.979	1.00	23.55	C
ATOM	922	C	MET	A	427	23.619	19.572	34.871	1.00	22.77	C
ATOM	923	O	MET	A	427	22.426	19.571	34.511	1.00	22.13	O
ATOM	924	CB	MET	A	427	25.382	18.953	33.318	1.00	23.77	C
ATOM	925	CG	MET	A	427	26.166	19.216	32.058	1.00	39.26	C
ATOM	926	SD	MET	A	427	27.097	17.719	31.652	1.00	33.49	S
ATOM	927	CE	MET	A	427	28.487	18.460	30.795	1.00	41.30	C
ATOM	928	N	LEU	A	428	24.041	19.061	36.022	1.00	18.69	N
ATOM	929	CA	LEU	A	428	23.120	18.480	36.982	1.00	18.97	C
ATOM	930	C	LEU	A	428	22.129	19.543	37.489	1.00	22.36	C
ATOM	931	O	LEU	A	428	20.945	19.276	37.539	1.00	20.87	O
ATOM	932	CB	LEU	A	428	23.827	17.857	38.196	1.00	21.39	C
ATOM	933	CG	LEU	A	428	24.649	16.599	37.827	1.00	22.33	C
ATOM	934	CD1	LEU	A	428	25.693	16.260	38.887	1.00	20.04	C
ATOM	935	CD2	LEU	A	428	23.682	15.441	37.588	1.00	19.44	C
ATOM	936	N	LEU	A	429	22.616	20.730	37.858	1.00	20.75	N
ATOM	937	CA	LEU	A	429	21.684	21.752	38.345	1.00	21.34	C
ATOM	938	C	LEU	A	429	20.771	22.255	37.222	1.00	21.01	C
ATOM	939	O	LEU	A	429	19.608	22.572	37.484	1.00	22.84	O
ATOM	940	CB	LEU	A	429	22.576	22.910	38.843	1.00	22.26	C
ATOM	941	CG	LEU	A	429	23.274	22.672	40.180	1.00	28.42	C
ATOM	942	CD1	LEU	A	429	24.433	23.668	40.299	1.00	25.07	C
ATOM	943	CD2	LEU	A	429	22.287	22.730	41.331	1.00	29.09	C
ATOM	944	N	ALA	A	430	21.330	22.398	36.022	1.00	22.61	N
ATOM	945	CA	ALA	A	430	20.459	22.904	34.935	1.00	23.01	C
ATOM	946	C	ALA	A	430	19.324	21.949	34.623	1.00	22.28	C
ATOM	947	O	ALA	A	430	18.143	22.234	34.415	1.00	21.97	O
ATOM	948	CB	ALA	A	430	21.351	23.146	33.718	1.00	24.63	C
ATOM	949	N	THR	A	431	19.626	20.616	34.677	1.00	22.30	N
ATOM	950	CA	THR	A	431	18.598	19.631	34.408	1.00	19.73	C
ATOM	951	C	THR	A	431	17.553	19.549	35.498	1.00	20.90	C
ATOM	952	O	THR	A	431	16.355	19.408	35.286	1.00	21.68	O
ATOM	953	CB	THR	A	431	19.270	18.273	34.091	1.00	23.86	C
ATOM	954	OG1	THR	A	431	20.179	18.438	33.003	1.00	22.73	O
ATOM	955	CG2	THR	A	431	18.173	17.291	33.763	1.00	25.40	C
ATOM	956	N	THR	A	432	18.044	19.673	36.746	1.00	22.30	N
ATOM	957	CA	THR	A	432	17.171	19.702	37.910	1.00	21.09	C
ATOM	958	C	THR	A	432	16.233	20.907	37.751	1.00	22.21	C
ATOM	959	O	THR	A	432	15.047	20.780	38.056	1.00	21.87	O
ATOM	960	CB	THR	A	432	17.967	19.863	39.205	1.00	20.58	C
ATOM	961	OG1	THR	A	432	18.805	18.708	39.393	1.00	19.56	O
ATOM	962	CG2	THR	A	432	17.000	19.978	40.401	1.00	20.00	C
ATOM	963	N	SER	A	433	16.810	22.022	37.252	1.00	23.81	N
ATOM	964	CA	SER	A	433	15.898	23.187	37.068	1.00	24.78	C
ATOM	965	C	SER	A	433	14.819	22.920	36.033	1.00	27.00	C
ATOM	966	O	SER	A	433	13.665	23.358	36.191	1.00	33.54	O
ATOM	967	CB	SER	A	433	16.709	24.424	36.654	1.00	29.38	C
ATOM	968	OG	SER	A	433	17.674	24.752	37.647	1.00	29.98	O
ATOM	969	N	ARG	A	434	15.148	22.167	34.984	1.00	26.97	N
ATOM	970	CA	ARG	A	434	14.097	21.842	33.990	1.00	26.97	C
ATOM	971	C	ARG	A	434	13.009	20.996	34.615	1.00	30.42	C
ATOM	972	O	ARG	A	434	11.823	21.204	34.328	1.00	27.41	O
ATOM	973	CB	ARG	A	434	14.752	21.167	32.801	1.00	25.33	C
ATOM	974	CG	ARG	A	434	13.708	20.721	31.827	1.00	42.33	C
ATOM	975	CD	ARG	A	434	12.817	21.554	31.010	1.00	49.31	C
ATOM	976	NE	ARG	A	434	11.713	22.346	31.491	1.00	46.14	N
ATOM	977	CZ	ARG	A	434	10.568	22.425	30.807	1.00	58.17	C
ATOM	978	NH1	ARG	A	434	10.399	21.741	29.673	1.00	57.71	N
ATOM	979	NH2	ARG	A	434	9.588	23.206	31.266	1.00	58.73	N
ATOM	980	N	PHE	A	435	13.341	20.066	35.543	1.00	22.36	N
ATOM	981	CA	PHE	A	435	12.293	19.277	36.179	1.00	25.31	C
ATOM	982	C	PHE	A	435	11.524	20.205	37.144	1.00	22.12	C
ATOM	983	O	PHE	A	435	10.294	20.007	37.311	1.00	24.29	O
ATOM	984	CB	PHE	A	435	12.909	18.077	36.894	1.00	20.35	C
ATOM	985	CG	PHE	A	435	13.318	16.946	35.972	1.00	23.24	C
ATOM	986	CD1	PHE	A	435	12.380	16.302	35.170	1.00	25.28	C
ATOM	987	CD2	PHE	A	435	14.634	16.508	35.910	1.00	25.71	C
ATOM	988	CE1	PHE	A	435	12.767	15.255	34.343	1.00	29.66	C
ATOM	989	CE2	PHE	A	435	15.004	15.490	35.079	1.00	25.15	C
ATOM	990	CZ	PHE	A	435	14.095	14.853	34.287	1.00	25.57	C
ATOM	991	N	ARG	A	436	12.161	21.138	37.805	1.00	21.91	N
ATOM	992	CA	ARG	A	436	11.422	22.028	38.727	1.00	23.44	C
ATOM	993	C	ARG	A	436	10.433	22.864	37.894	1.00	26.42	C
ATOM	994	O	ARG	A	436	9.242	22.945	38.249	1.00	27.86	O

ATOM	995	CB	ARG	A	436	12.368	22.967	39.489	1.00	23.65	C
ATOM	996	CG	ARG	A	436	11.670	23.942	40.483	1.00	29.31	C
ATOM	997	CD	ARG	A	436	12.636	25.141	40.739	1.00	30.70	C
ATOM	998	NE	ARG	A	436	13.845	24.503	41.263	1.00	34.92	N
ATOM	999	CZ	ARG	A	436	15.097	24.584	40.859	1.00	36.96	C
ATOM	1000	NH1	ARG	A	436	15.522	25.354	39.866	1.00	32.94	N
ATOM	1001	NH2	ARG	A	436	15.982	23.795	41.483	1.00	34.07	N
ATOM	1002	N	GLU	A	437	10.904	23.400	36.792	1.00	25.27	N
ATOM	1003	CA	GLU	A	437	10.005	24.217	35.935	1.00	32.74	C
ATOM	1004	C	GLU	A	437	8.817	23.413	35.448	1.00	32.08	C
ATOM	1005	O	GLU	A	437	7.668	23.875	35.338	1.00	27.72	O
ATOM	1006	CB	GLU	A	437	10.767	24.809	34.765	1.00	33.92	C
ATOM	1007	CG	GLU	A	437	11.831	25.799	35.161	1.00	40.07	C
ATOM	1008	CD	GLU	A	437	12.911	26.078	34.141	1.00	50.46	C
ATOM	1009	OE1	GLU	A	437	12.797	25.709	32.943	1.00	51.91	O
ATOM	1010	OE2	GLU	A	437	13.916	26.722	34.561	1.00	53.95	O
ATOM	1011	N	LEU	A	438	9.020	22.146	35.090	1.00	27.00	N
ATOM	1012	CA	LEU	A	438	7.921	21.269	34.681	1.00	27.50	C
ATOM	1013	C	LEU	A	438	7.122	20.813	35.882	1.00	23.14	C
ATOM	1014	O	LEU	A	438	6.119	20.121	35.729	1.00	25.79	O
ATOM	1015	CB	LEU	A	438	8.482	19.998	33.993	1.00	31.41	C
ATOM	1016	CG	LEU	A	438	8.842	20.132	32.526	1.00	40.32	C
ATOM	1017	CD1	LEU	A	438	9.491	18.860	31.987	1.00	41.08	C
ATOM	1018	CD2	LEU	A	438	7.614	20.452	31.675	1.00	39.10	C
ATOM	1019	N	LYS	A	439	7.498	21.129	37.130	1.00	24.41	N
ATOM	1020	CA	LYS	A	439	6.850	20.706	38.331	1.00	25.43	C
ATOM	1021	C	LYS	A	439	6.634	19.197	38.406	1.00	27.06	C
ATOM	1022	O	LYS	A	439	5.572	18.619	38.637	1.00	24.32	O
ATOM	1023	CB	LYS	A	439	5.500	21.405	38.605	1.00	33.10	C
ATOM	1024	CG	LYS	A	439	5.617	22.924	38.646	1.00	33.57	C
ATOM	1025	CD	LYS	A	439	4.307	23.503	39.237	1.00	42.76	C
ATOM	1026	CE	LYS	A	439	4.111	24.919	38.704	1.00	47.35	C
ATOM	1027	NZ	LYS	A	439	2.797	25.501	39.101	1.00	53.11	N
ATOM	1028	N	LEU	A	440	7.713	18.479	38.105	1.00	22.41	N
ATOM	1029	CA	LEU	A	440	7.745	17.019	38.154	1.00	19.51	C
ATOM	1030	C	LEU	A	440	7.205	16.500	39.479	1.00	20.02	C
ATOM	1031	O	LEU	A	440	7.514	17.037	40.524	1.00	20.61	O
ATOM	1032	CB	LEU	A	440	9.257	16.635	38.077	1.00	19.19	C
ATOM	1033	CG	LEU	A	440	9.491	15.126	38.152	1.00	23.27	C
ATOM	1034	CD1	LEU	A	440	8.999	14.476	36.869	1.00	20.04	C
ATOM	1035	CD2	LEU	A	440	10.973	14.766	38.354	1.00	23.57	C
ATOM	1036	N	GLN	A	441	6.261	15.572	39.391	1.00	21.24	N
ATOM	1037	CA	GLN	A	441	5.631	14.957	40.541	1.00	27.68	C
ATOM	1038	C	GLN	A	441	6.343	13.693	40.980	1.00	25.36	C
ATOM	1039	O	GLN	A	441	6.956	12.969	40.193	1.00	24.49	O
ATOM	1040	CB	GLN	A	441	4.168	14.650	40.088	1.00	26.49	C
ATOM	1041	CG	GLN	A	441	3.538	16.013	39.645	1.00	27.50	C
ATOM	1042	CD	GLN	A	441	3.371	16.910	40.870	1.00	38.48	C
ATOM	1043	OE1	GLN	A	441	2.720	16.500	41.851	1.00	44.82	O
ATOM	1044	NE2	GLN	A	441	3.926	18.107	40.916	1.00	40.95	N
ATOM	1045	N	HIS	A	442	6.263	13.394	42.274	1.00	26.03	N
ATOM	1046	CA	HIS	A	442	6.911	12.181	42.787	1.00	26.55	C
ATOM	1047	C	HIS	A	442	6.558	10.937	42.009	1.00	24.66	C
ATOM	1048	O	HIS	A	442	7.472	10.187	41.610	1.00	23.31	O
ATOM	1049	CB	HIS	A	442	6.603	12.052	44.276	1.00	27.31	C
ATOM	1050	CG	HIS	A	442	7.278	10.914	44.955	1.00	28.31	C
ATOM	1051	ND1	HIS	A	442	8.666	10.898	45.111	1.00	35.26	N
ATOM	1052	CD2	HIS	A	442	6.817	9.788	45.551	1.00	27.34	C
ATOM	1053	CE1	HIS	A	442	9.004	9.810	45.796	1.00	30.99	C
ATOM	1054	NE2	HIS	A	442	7.915	9.118	46.071	1.00	34.85	N
ATOM	1055	N	LYS	A	443	5.288	10.626	41.696	1.00	22.61	N
ATOM	1056	CA	LYS	A	443	5.004	9.421	40.939	1.00	22.02	C
ATOM	1057	C	LYS	A	443	5.508	9.465	39.490	1.00	20.78	C
ATOM	1058	O	LYS	A	443	5.660	8.400	38.883	1.00	21.28	O
ATOM	1059	CB	LYS	A	443	3.494	9.093	40.933	1.00	25.46	C
ATOM	1060	CG	LYS	A	443	3.045	8.904	42.433	1.00	29.15	C
ATOM	1061	CD	LYS	A	443	1.527	8.662	42.419	1.00	35.81	C
ATOM	1062	CE	LYS	A	443	0.973	8.749	43.842	1.00	50.19	C
ATOM	1063	NZ	LYS	A	443	-0.512	8.923	43.885	1.00	49.05	N
ATOM	1064	N	GLU	A	444	5.621	10.629	38.862	1.00	21.19	N
ATOM	1065	CA	GLU	A	444	6.194	10.712	37.520	1.00	21.16	C
ATOM	1066	C	GLU	A	444	7.704	10.362	37.666	1.00	19.76	C
ATOM	1067	O	GLU	A	444	8.215	9.621	36.854	1.00	20.88	O
ATOM	1068	CB	GLU	A	444	6.115	12.170	37.043	1.00	23.14	C
ATOM	1069	CG	GLU	A	444	4.686	12.479	36.566	1.00	26.05	C
ATOM	1070	CD	GLU	A	444	4.491	13.951	36.334	1.00	24.40	C
ATOM	1071	OE1	GLU	A	444	5.237	14.852	36.759	1.00	24.79	O

ATOM	1072	OE2	GLU	A	444	3.508	14.272	35.614	1.00	27.56	O
ATOM	1073	N	TYR	A	445	8.319	10.868	38.714	1.00	19.97	N
ATOM	1074	CA	TYR	A	445	9.741	10.551	38.980	1.00	22.26	C
ATOM	1075	C	TYR	A	445	9.921	9.048	39.128	1.00	19.04	C
ATOM	1076	O	TYR	A	445	10.875	8.469	38.622	1.00	20.97	O
ATOM	1077	CB	TYR	A	445	10.224	11.291	40.206	1.00	20.96	C
ATOM	1078	CG	TYR	A	445	11.366	10.659	40.969	1.00	24.17	C
ATOM	1079	CD1	TYR	A	445	12.643	10.727	40.420	1.00	26.90	C
ATOM	1080	CD2	TYR	A	445	11.166	10.029	42.192	1.00	22.07	C
ATOM	1081	CE1	TYR	A	445	13.727	10.156	41.087	1.00	22.98	C
ATOM	1082	CE2	TYR	A	445	12.249	9.453	42.829	1.00	26.07	C
ATOM	1083	CZ	TYR	A	445	13.491	9.528	42.285	1.00	25.04	C
ATOM	1084	OH	TYR	A	445	14.586	8.970	42.950	1.00	33.42	O
ATOM	1085	N	LEU	A	446	9.105	8.389	39.995	1.00	18.03	N
ATOM	1086	CA	LEU	A	446	9.240	6.938	40.102	1.00	24.19	C
ATOM	1087	C	LEU	A	446	9.232	6.239	38.755	1.00	18.83	C
ATOM	1088	O	LEU	A	446	10.038	5.315	38.475	1.00	20.62	O
ATOM	1089	CB	LEU	A	446	8.090	6.364	40.975	1.00	23.00	C
ATOM	1090	CG	LEU	A	446	8.104	7.007	42.394	1.00	27.50	C
ATOM	1091	CD1	LEU	A	446	6.864	6.568	43.165	1.00	30.48	C
ATOM	1092	CD2	LEU	A	446	9.360	6.584	43.147	1.00	27.81	C
ATOM	1093	N	CYS	A	447	8.256	6.568	37.863	1.00	19.93	N
ATOM	1094	CA	CYS	A	447	8.172	5.920	36.591	1.00	21.27	C
ATOM	1095	C	CYS	A	447	9.414	6.235	35.722	1.00	18.48	C
ATOM	1096	O	CYS	A	447	9.908	5.341	35.061	1.00	19.17	O
ATOM	1097	CB	CYS	A	447	6.956	6.313	35.775	1.00	20.29	C
ATOM	1098	SG	CYS	A	447	5.415	5.811	36.632	1.00	21.69	S
ATOM	1099	N	VAL	A	448	9.811	7.509	35.655	1.00	18.45	N
ATOM	1100	CA	VAL	A	448	10.988	7.806	34.826	1.00	20.08	C
ATOM	1101	C	VAL	A	448	12.245	7.095	35.280	1.00	21.79	C
ATOM	1102	O	VAL	A	448	13.002	6.560	34.466	1.00	19.53	O
ATOM	1103	CB	VAL	A	448	11.152	9.358	34.853	1.00	24.07	C
ATOM	1104	CG1	VAL	A	448	12.507	9.721	34.360	1.00	28.67	C
ATOM	1105	CG2	VAL	A	448	10.025	9.856	33.907	1.00	29.43	C
ATOM	1106	N	LYS	A	449	12.452	7.021	36.602	1.00	18.71	N
ATOM	1107	CA	LYS	A	449	13.626	6.290	37.101	1.00	17.39	C
ATOM	1108	C	LYS	A	449	13.652	4.857	36.649	1.00	23.94	C
ATOM	1109	O	LYS	A	449	14.646	4.251	36.178	1.00	18.35	O
ATOM	1110	CB	LYS	A	449	13.698	6.454	38.640	1.00	21.62	C
ATOM	1111	CG	LYS	A	449	15.080	5.973	39.135	1.00	23.58	C
ATOM	1112	CD	LYS	A	449	15.285	6.410	40.580	1.00	26.52	C
ATOM	1113	CE	LYS	A	449	14.188	5.858	41.501	1.00	25.87	C
ATOM	1114	NZ	LYS	A	449	14.611	5.765	42.945	1.00	26.92	N
ATOM	1115	N	ALA	A	450	12.478	4.190	36.703	1.00	18.50	N
ATOM	1116	CA	ALA	A	450	12.323	2.831	36.260	1.00	21.41	C
ATOM	1117	C	ALA	A	450	12.563	2.711	34.783	1.00	20.13	C
ATOM	1118	O	ALA	A	450	13.206	1.738	34.329	1.00	18.60	O
ATOM	1119	CB	ALA	A	450	10.985	2.198	36.684	1.00	20.44	C
ATOM	1120	N	MET	A	451	12.139	3.721	33.968	1.00	18.77	N
ATOM	1121	CA	MET	A	451	12.358	3.655	32.570	1.00	18.14	C
ATOM	1122	C	MET	A	451	13.877	3.727	32.260	1.00	17.57	C
ATOM	1123	O	MET	A	451	14.311	3.045	31.322	1.00	20.73	O
ATOM	1124	CB	MET	A	451	11.633	4.842	31.842	1.00	21.77	C
ATOM	1125	CG	MET	A	451	10.131	4.584	32.084	1.00	27.69	C
ATOM	1126	SD	MET	A	451	9.016	5.929	31.603	1.00	34.64	S
ATOM	1127	CE	MET	A	451	9.857	6.385	30.106	1.00	35.01	C
ATOM	1128	N	ILE	A	452	14.588	4.498	33.024	1.00	16.50	N
ATOM	1129	CA	ILE	A	452	16.037	4.640	32.828	1.00	17.08	C
ATOM	1130	C	ILE	A	452	16.654	3.246	32.962	1.00	20.78	C
ATOM	1131	O	ILE	A	452	17.508	2.878	32.158	1.00	19.75	O
ATOM	1132	CB	ILE	A	452	16.625	5.638	33.802	1.00	19.19	C
ATOM	1133	CG1	ILE	A	452	16.292	7.107	33.388	1.00	17.81	C
ATOM	1134	CG2	ILE	A	452	18.162	5.500	33.943	1.00	20.76	C
ATOM	1135	CD1	ILE	A	452	16.477	8.045	34.585	1.00	21.82	C
ATOM	1136	N	LEU	A	453	16.259	2.506	33.992	1.00	19.70	N
ATOM	1137	CA	LEU	A	453	16.809	1.164	34.201	1.00	21.38	C
ATOM	1138	C	LEU	A	453	16.452	0.220	33.063	1.00	22.74	C
ATOM	1139	O	LEU	A	453	17.339	-0.447	32.508	1.00	23.04	O
ATOM	1140	CB	LEU	A	453	16.272	0.592	35.526	1.00	20.23	C
ATOM	1141	CG	LEU	A	453	16.436	-0.933	35.734	1.00	23.99	C
ATOM	1142	CD1	LEU	A	453	17.861	-1.311	35.991	1.00	24.30	C
ATOM	1143	CD2	LEU	A	453	15.585	-1.366	36.938	1.00	30.09	C
ATOM	1144	N	LEU	A	454	15.173	0.257	32.658	1.00	18.55	N
ATOM	1145	CA	LEU	A	454	14.763	-0.675	31.599	1.00	20.55	C
ATOM	1146	C	LEU	A	454	15.129	-0.287	30.191	1.00	22.40	C
ATOM	1147	O	LEU	A	454	15.126	-1.229	29.347	1.00	25.90	O
ATOM	1148	CB	LEU	A	454	13.230	-0.867	31.745	1.00	21.21	C

ATOM	1149	CG	LEU	A	454	12.728	-1.319	33.126	1.00	24.00	C
ATOM	1150	CD1	LEU	A	454	11.213	-1.146	33.221	1.00	23.17	C
ATOM	1151	CD2	LEU	A	454	13.163	-2.762	33.390	1.00	24.11	C
ATOM	1152	N	ASN	A	455	15.439	0.969	29.912	1.00	20.57	N
ATOM	1153	CA	ASN	A	455	15.704	1.437	28.552	1.00	26.20	C
ATOM	1154	C	ASN	A	455	17.175	1.744	28.246	1.00	27.11	C
ATOM	1155	O	ASN	A	455	17.552	1.762	27.088	1.00	33.65	O
ATOM	1156	CB	ASN	A	455	14.976	2.798	28.371	1.00	31.10	C
ATOM	1157	CG	ASN	A	455	15.173	3.511	27.043	1.00	38.22	C
ATOM	1158	OD1	ASN	A	455	15.592	4.701	26.960	1.00	37.37	O
ATOM	1159	ND2	ASN	A	455	14.858	2.842	25.935	1.00	34.72	N
ATOM	1160	N	SER	A	456	17.997	1.775	29.258	1.00	30.24	N
ATOM	1161	CA	SER	A	456	19.382	2.119	29.231	1.00	36.00	C
ATOM	1162	C	SER	A	456	20.311	1.573	28.153	1.00	36.83	C
ATOM	1163	O	SER	A	456	21.062	2.288	27.473	1.00	33.20	O
ATOM	1164	CB	SER	A	456	20.038	1.689	30.582	1.00	39.77	C
ATOM	1165	OG	SER	A	456	19.588	0.394	31.044	1.00	37.99	O
ATOM	1166	N	ALA	A	457	20.318	0.245	28.192	1.00	35.54	N
ATOM	1167	CA	ALA	A	457	21.274	-0.464	27.352	1.00	42.47	C
ATOM	1168	C	ALA	A	457	21.142	-0.038	25.896	1.00	41.31	C
ATOM	1169	O	ALA	A	457	20.080	0.110	25.316	1.00	44.55	O
ATOM	1170	CB	ALA	A	457	21.235	-1.963	27.524	1.00	40.51	C
ATOM	1171	N	MET	A	458	22.311	0.172	25.315	1.00	46.24	N
ATOM	1172	CA	MET	A	458	22.508	0.547	23.933	1.00	48.76	C
ATOM	1173	C	MET	A	458	22.623	-0.689	23.027	1.00	53.25	C
ATOM	1174	O	MET	A	458	22.945	-1.782	23.501	1.00	58.48	O
ATOM	1175	CB	MET	A	458	23.841	1.294	23.819	1.00	47.06	C
ATOM	1176	CG	MET	A	458	23.888	2.585	24.618	1.00	44.75	C
ATOM	1177	SD	MET	A	458	22.827	3.882	23.950	1.00	37.82	S
ATOM	1178	CE	MET	A	458	23.515	4.064	22.295	1.00	37.93	C
ATOM	1179	N	ALA	A	469	12.316	-14.119	24.676	1.00	60.19	N
ATOM	1180	CA	ALA	A	469	11.449	-14.316	25.833	1.00	60.72	C
ATOM	1181	C	ALA	A	469	11.881	-13.355	26.943	1.00	60.69	C
ATOM	1182	O	ALA	A	469	11.014	-12.627	27.414	1.00	63.87	O
ATOM	1183	CB	ALA	A	469	11.405	-15.721	26.368	1.00	61.18	C
ATOM	1184	N	SER	A	470	13.153	-13.392	27.347	1.00	59.40	N
ATOM	1185	CA	SER	A	470	13.620	-12.423	28.348	1.00	57.12	C
ATOM	1186	C	SER	A	470	13.440	-11.061	27.661	1.00	58.67	C
ATOM	1187	O	SER	A	470	12.743	-10.174	28.142	1.00	57.72	O
ATOM	1188	CB	SER	A	470	15.066	-12.641	28.751	1.00	56.65	C
ATOM	1189	OG	SER	A	470	15.454	-11.735	29.774	1.00	53.66	O
ATOM	1190	N	SER	A	471	13.997	-10.972	26.450	1.00	60.93	N
ATOM	1191	CA	SER	A	471	13.866	-9.803	25.607	1.00	60.15	C
ATOM	1192	C	SER	A	471	12.387	-9.446	25.460	1.00	61.94	C
ATOM	1193	O	SER	A	471	12.018	-8.291	25.674	1.00	59.07	O
ATOM	1194	CB	SER	A	471	14.458	-10.007	24.210	1.00	60.90	C
ATOM	1195	OG	SER	A	471	13.824	-9.104	23.313	1.00	63.44	O
ATOM	1196	N	ARG	A	472	11.523	-10.412	25.150	1.00	61.18	N
ATOM	1197	CA	ARG	A	472	10.091	-10.111	25.031	1.00	61.86	C
ATOM	1198	C	ARG	A	472	9.455	-9.705	26.351	1.00	55.71	C
ATOM	1199	O	ARG	A	472	8.492	-8.942	26.430	1.00	55.98	O
ATOM	1200	CB	ARG	A	472	9.415	-11.346	24.439	1.00	66.43	C
ATOM	1201	CG	ARG	A	472	7.896	-11.320	24.439	1.00	71.44	C
ATOM	1202	CD	ARG	A	472	7.339	-12.571	23.765	1.00	75.25	C
ATOM	1203	NE	ARG	A	472	8.268	-13.690	23.790	1.00	77.23	N
ATOM	1204	CZ	ARG	A	472	8.229	-14.781	23.045	1.00	79.57	C
ATOM	1205	NH1	ARG	A	472	7.268	-14.977	22.145	1.00	80.41	N
ATOM	1206	NH2	ARG	A	472	9.174	-15.705	23.192	1.00	79.36	N
ATOM	1207	N	LYS	A	473	9.959	-10.212	27.461	1.00	52.42	N
ATOM	1208	CA	LYS	A	473	9.497	-9.883	28.804	1.00	52.83	C
ATOM	1209	C	LYS	A	473	9.945	-8.463	29.166	1.00	48.89	C
ATOM	1210	O	LYS	A	473	9.187	-7.725	29.794	1.00	51.86	O
ATOM	1211	CB	LYS	A	473	10.047	-10.914	29.790	1.00	56.33	C
ATOM	1212	CG	LYS	A	473	8.988	-11.534	30.696	1.00	59.83	C
ATOM	1213	CD	LYS	A	473	9.414	-12.925	31.140	1.00	61.94	C
ATOM	1214	CE	LYS	A	473	8.378	-13.586	32.024	1.00	63.15	C
ATOM	1215	NZ	LYS	A	473	8.870	-14.867	32.606	1.00	65.28	N
ATOM	1216	N	LEU	A	474	11.144	-8.065	28.738	1.00	45.57	N
ATOM	1217	CA	LEU	A	474	11.679	-6.734	28.989	1.00	43.81	C
ATOM	1218	C	LEU	A	474	10.823	-5.675	28.309	1.00	45.51	C
ATOM	1219	O	LEU	A	474	10.280	-4.751	28.917	1.00	40.26	O
ATOM	1220	CB	LEU	A	474	13.135	-6.592	28.503	1.00	42.11	C
ATOM	1221	CG	LEU	A	474	13.753	-5.187	28.638	1.00	39.15	C
ATOM	1222	CD1	LEU	A	474	13.670	-4.693	30.088	1.00	34.72	C
ATOM	1223	CD2	LEU	A	474	15.201	-5.159	28.185	1.00	34.37	C
ATOM	1224	N	ALA	A	475	10.584	-5.830	27.004	1.00	42.52	N
ATOM	1225	CA	ALA	A	475	9.787	-4.953	26.164	1.00	41.94	C

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ATOM   1226  C   ALA A 475       8.452  -4.581  26.793  1.00 41.48           C
ATOM   1227  O   ALA A 475       7.891  -3.490  26.828  1.00 45.13           O
ATOM   1228  CB  ALA A 475       9.517  -5.761  24.884  1.00 41.45           C
ATOM   1229  N   HIS A 476       7.859  -5.612  27.354  1.00 44.24           N
ATOM   1230  CA  HIS A 476       6.609  -5.656  28.053  1.00 48.12           C
ATOM   1231  C   HIS A 476       6.640  -4.990  29.425  1.00 42.60           C
ATOM   1232  O   HIS A 476       5.672  -4.359  29.830  1.00 39.37           O
ATOM   1233  CB  HIS A 476       6.243  -7.140  28.168  1.00 54.04           C
ATOM   1234  CG  HIS A 476       5.008  -7.310  28.990  1.00 55.91           C
ATOM   1235  ND1 HIS A 476       5.063  -7.803  30.275  1.00 59.64           N
ATOM   1236  CD2 HIS A 476       3.716  -7.013  28.733  1.00 58.19           C
ATOM   1237  CE1 HIS A 476       3.835  -7.821  30.770  1.00 60.13           C
ATOM   1238  NE2 HIS A 476       2.996  -7.351  29.856  1.00 58.29           N
ATOM   1239  N   LEU A 477       7.757  -5.132  30.124  1.00 41.27           N
ATOM   1240  CA  LEU A 477       7.937  -4.489  31.425  1.00 38.48           C
ATOM   1241  C   LEU A 477       8.000  -2.966  31.201  1.00 30.49           C
ATOM   1242  O   LEU A 477       7.353  -2.117  31.820  1.00 31.42           O
ATOM   1243  CB  LEU A 477       9.229  -4.994  32.078  1.00 37.51           C
ATOM   1244  CG  LEU A 477       9.565  -4.461  33.471  1.00 44.59           C
ATOM   1245  CD1 LEU A 477       8.323  -4.147  34.302  1.00 42.81           C
ATOM   1246  CD2 LEU A 477      10.487  -5.429  34.227  1.00 40.95           C
ATOM   1247  N   LEU A 478       8.786  -2.632  30.194  1.00 31.48           N
ATOM   1248  CA  LEU A 478       8.993  -1.262  29.749  1.00 33.28           C
ATOM   1249  C   LEU A 478       7.676  -0.674  29.290  1.00 33.35           C
ATOM   1250  O   LEU A 478       7.328   0.441  29.722  1.00 30.92           O
ATOM   1251  CB  LEU A 478      10.130  -1.139  28.730  1.00 31.10           C
ATOM   1252  CG  LEU A 478      10.375   0.295  28.241  1.00 34.76           C
ATOM   1253  CD1 LEU A 478      10.866   1.210  29.382  1.00 32.74           C
ATOM   1254  CD2 LEU A 478      11.333   0.415  27.084  1.00 33.23           C
ATOM   1255  N   ASN A 479       6.888  -1.392  28.480  1.00 34.95           N
ATOM   1256  CA  ASN A 479       5.578  -0.880  28.099  1.00 35.98           C
ATOM   1257  C   ASN A 479       4.662  -0.638  29.299  1.00 28.84           C
ATOM   1258  O   ASN A 479       3.970   0.359  29.338  1.00 29.63           O
ATOM   1259  CB  ASN A 479       4.908  -1.837  27.092  1.00 42.20           C
ATOM   1260  CG  ASN A 479       5.611  -1.804  25.735  1.00 48.35           C
ATOM   1261  OD1 ASN A 479       5.951  -0.721  25.237  1.00 47.39           O
ATOM   1262  ND2 ASN A 479       5.801  -3.025  25.210  1.00 50.10           N
ATOM   1263  N   ALA A 480       4.651  -1.498  30.311  1.00 33.47           N
ATOM   1264  CA  ALA A 480       3.829  -1.276  31.503  1.00 30.90           C
ATOM   1265  C   ALA A 480       4.228  -0.030  32.259  1.00 23.64           C
ATOM   1266  O   ALA A 480       3.352   0.665  32.801  1.00 26.15           O
ATOM   1267  CB  ALA A 480       3.908  -2.526  32.390  1.00 34.69           C
ATOM   1268  N   VAL A 481       5.553   0.298  32.353  1.00 23.24           N
ATOM   1269  CA  VAL A 481       5.960   1.470  33.122  1.00 22.74           C
ATOM   1270  C   VAL A 481       5.517   2.722  32.351  1.00 18.06           C
ATOM   1271  O   VAL A 481       5.153   3.729  32.942  1.00 26.87           O
ATOM   1272  CB  VAL A 481       7.469   1.529  33.436  1.00 27.05           C
ATOM   1273  CG1 VAL A 481       7.838   2.847  34.155  1.00 23.49           C
ATOM   1274  CG2 VAL A 481       7.910   0.314  34.266  1.00 28.60           C
ATOM   1275  N   THR A 482       5.655   2.689  31.030  1.00 23.57           N
ATOM   1276  CA  THR A 482       5.220   3.783  30.154  1.00 26.39           C
ATOM   1277  C   THR A 482       3.721   4.017  30.327  1.00 22.53           C
ATOM   1278  O   THR A 482       3.225   5.112  30.645  1.00 23.67           O
ATOM   1279  CB  THR A 482       5.588   3.436  28.695  1.00 31.20           C
ATOM   1280  OG1 THR A 482       6.974   3.215  28.498  1.00 32.83           O
ATOM   1281  CG2 THR A 482       5.230   4.522  27.698  1.00 33.29           C
ATOM   1282  N   ASP A 483       2.917   2.922  30.355  1.00 27.94           N
ATOM   1283  CA  ASP A 483       1.471   3.068  30.599  1.00 29.23           C
ATOM   1284  C   ASP A 483       1.177   3.699  31.933  1.00 25.55           C
ATOM   1285  O   ASP A 483       0.289   4.539  32.087  1.00 31.75           O
ATOM   1286  CB  ASP A 483       0.689   1.742  30.578  1.00 33.31           C
ATOM   1287  CG  ASP A 483       0.420   1.189  29.200  1.00 37.11           C
ATOM   1288  OD1 ASP A 483       0.338   1.935  28.199  1.00 38.37           O
ATOM   1289  OD2 ASP A 483       0.243  -0.048  29.064  1.00 40.00           O
ATOM   1290  N   ALA A 484       1.984   3.364  32.957  1.00 25.28           N
ATOM   1291  CA  ALA A 484       1.859   3.856  34.306  1.00 23.57           C
ATOM   1292  C   ALA A 484       2.129   5.346  34.356  1.00 22.08           C
ATOM   1293  O   ALA A 484       1.476   6.126  35.054  1.00 26.22           O
ATOM   1294  CB  ALA A 484       2.811   3.100  35.251  1.00 22.07           C
ATOM   1295  N   LEU A 485       3.192   5.769  33.625  1.00 26.30           N
ATOM   1296  CA  LEU A 485       3.525   7.206  33.576  1.00 20.03           C
ATOM   1297  C   LEU A 485       2.364   7.896  32.849  1.00 22.17           C
ATOM   1298  O   LEU A 485       1.940   8.956  33.304  1.00 26.47           O
ATOM   1299  CB  LEU A 485       4.842   7.395  32.776  1.00 20.92           C
ATOM   1300  CG  LEU A 485       5.232   8.863  32.522  1.00 21.92           C
ATOM   1301  CD1 LEU A 485       5.387   9.644  33.822  1.00 23.10           C
ATOM   1302  CD2 LEU A 485       6.554   8.878  31.721  1.00 22.61           C
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ATOM	1303	N	VAL	A	486	1.882	7.319	31.775	1.00	27.15	N
ATOM	1304	CA	VAL	A	486	0.750	7.946	31.037	1.00	27.86	C
ATOM	1305	C	VAL	A	486	-0.459	8.062	31.975	1.00	27.38	C
ATOM	1306	O	VAL	A	486	-1.137	9.081	32.037	1.00	30.67	O
ATOM	1307	CB	VAL	A	486	0.450	7.134	29.781	1.00	31.08	C
ATOM	1308	CG1	VAL	A	486	-0.889	7.515	29.131	1.00	34.82	C
ATOM	1309	CG2	VAL	A	486	1.555	7.198	28.723	1.00	29.27	C
ATOM	1310	N	TRP	A	487	-0.704	7.032	32.786	1.00	29.86	N
ATOM	1311	CA	TRP	A	487	-1.813	7.029	33.747	1.00	33.05	C
ATOM	1312	C	TRP	A	487	-1.595	8.089	34.799	1.00	36.27	C
ATOM	1313	O	TRP	A	487	-2.490	8.869	35.094	1.00	33.38	O
ATOM	1314	CB	TRP	A	487	-1.961	5.661	34.390	1.00	32.60	C
ATOM	1315	CG	TRP	A	487	-2.952	5.586	35.502	1.00	37.95	C
ATOM	1316	CD1	TRP	A	487	-4.312	5.400	35.367	1.00	43.97	C
ATOM	1317	CD2	TRP	A	487	-2.695	5.681	36.900	1.00	35.97	C
ATOM	1318	NE1	TRP	A	487	-4.915	5.354	36.603	1.00	37.38	N
ATOM	1319	CE2	TRP	A	487	-3.942	5.503	37.560	1.00	41.60	C
ATOM	1320	CE3	TRP	A	487	-1.551	5.845	37.670	1.00	36.56	C
ATOM	1321	CZ2	TRP	A	487	-4.056	5.521	38.947	1.00	40.06	C
ATOM	1322	CZ3	TRP	A	487	-1.675	5.863	39.047	1.00	42.43	C
ATOM	1323	CH2	TRP	A	487	-2.925	5.715	39.689	1.00	39.24	C
ATOM	1324	N	VAL	A	488	-0.324	8.225	35.293	1.00	33.25	N
ATOM	1325	CA	VAL	A	488	-0.071	9.273	36.250	1.00	24.32	C
ATOM	1326	C	VAL	A	488	-0.300	10.651	35.669	1.00	23.44	C
ATOM	1327	O	VAL	A	488	-0.775	11.526	36.380	1.00	28.37	O
ATOM	1328	CB	VAL	A	488	1.404	9.226	36.805	1.00	25.91	C
ATOM	1329	CG1	VAL	A	488	1.675	10.401	37.711	1.00	26.73	C
ATOM	1330	CG2	VAL	A	488	1.628	7.908	37.545	1.00	26.12	C
ATOM	1331	N	ILE	A	489	0.120	10.908	34.411	1.00	24.14	N
ATOM	1332	CA	ILE	A	489	-0.044	12.233	33.849	1.00	21.86	C
ATOM	1333	C	ILE	A	489	-1.572	12.521	33.604	1.00	24.17	C
ATOM	1334	O	ILE	A	489	-2.028	13.610	33.910	1.00	27.18	O
ATOM	1335	CB	ILE	A	489	0.659	12.310	32.501	1.00	27.91	C
ATOM	1336	CG1	ILE	A	489	2.205	12.283	32.756	1.00	23.18	C
ATOM	1337	CG2	ILE	A	489	0.349	13.603	31.762	1.00	24.36	C
ATOM	1338	CD1	ILE	A	489	2.871	11.911	31.416	1.00	23.22	C
ATOM	1339	N	ALA	A	490	-2.197	11.421	33.241	1.00	27.97	N
ATOM	1340	CA	ALA	A	490	-3.661	11.609	32.971	1.00	38.05	C
ATOM	1341	C	ALA	A	490	-4.468	12.018	34.168	1.00	40.03	C
ATOM	1342	O	ALA	A	490	-5.461	12.758	34.028	1.00	44.53	O
ATOM	1343	CB	ALA	A	490	-4.193	10.347	32.324	1.00	32.57	C
ATOM	1344	N	LYS	A	491	-4.053	11.710	35.395	1.00	41.28	N
ATOM	1345	CA	LYS	A	491	-4.770	12.013	36.608	1.00	39.88	C
ATOM	1346	C	LYS	A	491	-4.714	13.450	37.049	1.00	41.63	C
ATOM	1347	O	LYS	A	491	-5.514	13.839	37.904	1.00	40.95	O
ATOM	1348	CB	LYS	A	491	-4.423	10.983	37.665	1.00	46.07	C
ATOM	1349	CG	LYS	A	491	-3.555	11.300	38.854	1.00	46.19	C
ATOM	1350	CD	LYS	A	491	-3.467	10.033	39.711	1.00	49.83	C
ATOM	1351	CE	LYS	A	491	-2.668	10.278	40.973	1.00	53.59	C
ATOM	1352	NZ	LYS	A	491	-2.631	9.101	41.881	1.00	55.67	N
ATOM	1353	N	SER	A	492	-3.923	14.308	36.410	1.00	34.55	N
ATOM	1354	CA	SER	A	492	-3.912	15.741	36.672	1.00	36.18	C
ATOM	1355	C	SER	A	492	-5.139	16.352	35.960	1.00	37.48	C
ATOM	1356	O	SER	A	492	-5.478	17.525	36.050	1.00	40.92	O
ATOM	1357	CB	SER	A	492	-2.639	16.378	36.086	1.00	35.10	C
ATOM	1358	OG	SER	A	492	-2.727	16.210	34.657	1.00	35.62	O
ATOM	1359	N	GLY	A	493	-5.740	15.560	35.084	1.00	38.75	N
ATOM	1360	CA	GLY	A	493	-6.895	15.878	34.283	1.00	42.90	C
ATOM	1361	C	GLY	A	493	-6.682	16.956	33.240	1.00	43.44	C
ATOM	1362	O	GLY	A	493	-7.654	17.652	32.910	1.00	40.48	O
ATOM	1363	N	ILE	A	494	-5.456	17.078	32.727	1.00	35.87	N
ATOM	1364	CA	ILE	A	494	-5.212	18.106	31.690	1.00	33.56	C
ATOM	1365	C	ILE	A	494	-5.691	17.494	30.391	1.00	30.12	C
ATOM	1366	O	ILE	A	494	-5.950	16.286	30.309	1.00	32.80	O
ATOM	1367	CB	ILE	A	494	-3.734	18.543	31.664	1.00	36.79	C
ATOM	1368	CG1	ILE	A	494	-2.877	17.319	31.371	1.00	31.42	C
ATOM	1369	CG2	ILE	A	494	-3.387	19.189	33.002	1.00	37.06	C
ATOM	1370	CD1	ILE	A	494	-1.378	17.458	31.570	1.00	31.81	C
ATOM	1371	N	SER	A	495	-5.889	18.311	29.352	1.00	32.65	N
ATOM	1372	CA	SER	A	495	-6.414	17.762	28.115	1.00	35.83	C
ATOM	1373	C	SER	A	495	-5.440	16.781	27.479	1.00	41.15	C
ATOM	1374	O	SER	A	495	-4.258	16.704	27.857	1.00	35.53	O
ATOM	1375	CB	SER	A	495	-6.712	18.859	27.106	1.00	39.81	C
ATOM	1376	OG	SER	A	495	-5.497	19.492	26.741	1.00	41.83	O
ATOM	1377	N	SER	A	496	-6.019	16.067	26.511	1.00	38.77	N
ATOM	1378	CA	SER	A	496	-5.253	15.104	25.744	1.00	40.43	C
ATOM	1379	C	SER	A	496	-4.047	15.740	25.068	1.00	39.16	C

ATOM	1380	O	SER	A	496	-2.997	15.075	25.065	1.00	32.27	O
ATOM	1381	CB	SER	A	496	-6.165	14.425	24.705	1.00	45.71	C
ATOM	1382	OG	SER	A	496	-6.874	15.475	24.036	1.00	58.28	O
ATOM	1383	N	GLN	A	497	-4.163	16.920	24.486	1.00	33.62	N
ATOM	1384	CA	GLN	A	497	-3.013	17.537	23.846	1.00	30.60	C
ATOM	1385	C	GLN	A	497	-1.903	17.799	24.866	1.00	27.01	C
ATOM	1386	O	GLN	A	497	-0.712	17.722	24.566	1.00	25.03	O
ATOM	1387	CB	GLN	A	497	-3.450	18.912	23.304	1.00	29.67	C
ATOM	1388	CG	GLN	A	497	-2.408	19.547	22.388	1.00	27.55	C
ATOM	1389	CD	GLN	A	497	-1.449	20.438	23.130	1.00	34.92	C
ATOM	1390	OE1	GLN	A	497	-1.807	20.960	24.189	1.00	40.14	O
ATOM	1391	NE2	GLN	A	497	-0.228	20.613	22.652	1.00	32.44	N
ATOM	1392	N	GLN	A	498	-2.270	18.326	26.042	1.00	26.37	N
ATOM	1393	CA	GLN	A	498	-1.342	18.677	27.107	1.00	28.55	C
ATOM	1394	C	GLN	A	498	-0.738	17.413	27.727	1.00	26.58	C
ATOM	1395	O	GLN	A	498	0.435	17.482	28.207	1.00	26.30	O
ATOM	1396	CB	GLN	A	498	-1.952	19.578	28.196	1.00	33.52	C
ATOM	1397	CG	GLN	A	498	-2.140	21.027	27.725	1.00	38.85	C
ATOM	1398	CD	GLN	A	498	-0.799	21.708	27.516	1.00	44.43	C
ATOM	1399	OE1	GLN	A	498	-0.054	21.850	28.497	1.00	49.42	O
ATOM	1400	NE2	GLN	A	498	-0.496	22.141	26.294	1.00	39.08	N
ATOM	1401	N	GLN	A	499	-1.450	16.296	27.726	1.00	26.16	N
ATOM	1402	CA	GLN	A	499	-0.911	15.050	28.276	1.00	26.49	C
ATOM	1403	C	GLN	A	499	0.242	14.556	27.407	1.00	31.44	C
ATOM	1404	O	GLN	A	499	1.226	14.057	27.933	1.00	26.52	O
ATOM	1405	CB	GLN	A	499	-1.931	13.910	28.339	1.00	30.42	C
ATOM	1406	CG	GLN	A	499	-2.997	14.113	29.400	1.00	31.96	C
ATOM	1407	CD	GLN	A	499	-3.974	12.950	29.393	1.00	41.30	C
ATOM	1408	OE1	GLN	A	499	-3.628	11.776	29.317	1.00	40.19	O
ATOM	1409	NE2	GLN	A	499	-5.267	13.267	29.460	1.00	41.59	N
ATOM	1410	N	SER	A	500	0.064	14.631	26.086	1.00	25.27	N
ATOM	1411	CA	SER	A	500	1.083	14.229	25.133	1.00	29.39	C
ATOM	1412	C	SER	A	500	2.292	15.157	25.229	1.00	25.24	C
ATOM	1413	O	SER	A	500	3.425	14.688	25.136	1.00	24.41	O
ATOM	1414	CB	SER	A	500	0.574	14.277	23.690	1.00	28.59	C
ATOM	1415	OG	SER	A	500	-0.409	13.240	23.513	1.00	34.11	O
ATOM	1416	N	MET	A	501	2.048	16.461	25.413	1.00	24.36	N
ATOM	1417	CA	MET	A	501	3.145	17.410	25.539	1.00	25.98	C
ATOM	1418	C	MET	A	501	3.920	17.119	26.823	1.00	26.81	C
ATOM	1419	O	MET	A	501	5.158	17.203	26.791	1.00	23.19	O
ATOM	1420	CB	MET	A	501	2.697	18.890	25.502	1.00	30.80	C
ATOM	1421	CG	MET	A	501	3.552	19.758	24.600	1.00	46.15	C
ATOM	1422	SD	MET	A	501	3.103	19.769	22.874	1.00	47.15	S
ATOM	1423	CE	MET	A	501	2.464	18.152	22.499	1.00	52.53	C
ATOM	1424	N	ARG	A	502	3.230	16.759	27.895	1.00	20.36	N
ATOM	1425	CA	ARG	A	502	3.927	16.549	29.173	1.00	22.08	C
ATOM	1426	C	ARG	A	502	4.758	15.264	29.102	1.00	21.26	C
ATOM	1427	O	ARG	A	502	5.910	15.222	29.533	1.00	22.71	O
ATOM	1428	CB	ARG	A	502	2.897	16.497	30.329	1.00	23.98	C
ATOM	1429	CG	ARG	A	502	3.628	16.378	31.664	1.00	24.01	C
ATOM	1430	CD	ARG	A	502	2.730	16.533	32.892	1.00	27.06	C
ATOM	1431	NE	ARG	A	502	3.540	16.593	34.105	1.00	23.61	N
ATOM	1432	CZ	ARG	A	502	4.211	17.635	34.552	1.00	22.53	C
ATOM	1433	NH1	ARG	A	502	4.895	17.470	35.711	1.00	26.82	N
ATOM	1434	NH2	ARG	A	502	4.218	18.780	33.907	1.00	22.56	N
ATOM	1435	N	LEU	A	503	4.162	14.232	28.466	1.00	19.02	N
ATOM	1436	CA	LEU	A	503	4.925	12.986	28.284	1.00	21.30	C
ATOM	1437	C	LEU	A	503	6.138	13.260	27.421	1.00	23.43	C
ATOM	1438	O	LEU	A	503	7.292	12.886	27.742	1.00	19.06	O
ATOM	1439	CB	LEU	A	503	3.966	11.989	27.615	1.00	25.98	C
ATOM	1440	CG	LEU	A	503	4.535	10.636	27.243	1.00	22.62	C
ATOM	1441	CD1	LEU	A	503	5.053	9.898	28.501	1.00	21.09	C
ATOM	1442	CD2	LEU	A	503	3.433	9.776	26.604	1.00	23.95	C
ATOM	1443	N	ALA	A	504	5.963	14.019	26.321	1.00	18.94	N
ATOM	1444	CA	ALA	A	504	7.116	14.256	25.459	1.00	20.93	C
ATOM	1445	C	ALA	A	504	8.182	15.057	26.200	1.00	22.24	C
ATOM	1446	O	ALA	A	504	9.386	14.873	26.026	1.00	22.41	O
ATOM	1447	CB	ALA	A	504	6.684	15.142	24.288	1.00	26.47	C
ATOM	1448	N	ASN	A	505	7.748	16.098	26.956	1.00	19.01	N
ATOM	1449	CA	ASN	A	505	8.708	16.944	27.653	1.00	24.23	C
ATOM	1450	C	ASN	A	505	9.551	16.177	28.690	1.00	24.35	C
ATOM	1451	O	ASN	A	505	10.755	16.445	28.839	1.00	22.02	O
ATOM	1452	CB	ASN	A	505	8.055	18.097	28.416	1.00	25.76	C
ATOM	1453	CG	ASN	A	505	7.840	19.266	27.443	1.00	36.96	C
ATOM	1454	OD1	ASN	A	505	8.741	19.470	26.630	1.00	38.16	O
ATOM	1455	ND2	ASN	A	505	6.676	19.872	27.650	1.00	36.08	N
ATOM	1456	N	LEU	A	506	8.859	15.309	29.406	1.00	20.34	N

ATOM	1457	CA	LEU	A	506	9.589	14.516	30.450	1.00	20.82	C
ATOM	1458	C	LEU	A	506	10.539	13.552	29.784	1.00	20.11	C
ATOM	1459	O	LEU	A	506	11.696	13.419	30.231	1.00	21.17	O
ATOM	1460	CB	LEU	A	506	8.592	13.707	31.278	1.00	19.79	C
ATOM	1461	CG	LEU	A	506	7.680	14.476	32.230	1.00	22.72	C
ATOM	1462	CD1	LEU	A	506	6.606	13.555	32.781	1.00	23.93	C
ATOM	1463	CD2	LEU	A	506	8.442	15.065	33.422	1.00	26.30	C
ATOM	1464	N	LEU	A	507	10.084	12.890	28.683	1.00	19.88	N
ATOM	1465	CA	LEU	A	507	10.988	11.929	28.063	1.00	21.64	C
ATOM	1466	C	LEU	A	507	12.076	12.613	27.268	1.00	22.05	C
ATOM	1467	O	LEU	A	507	13.121	11.940	27.163	1.00	25.18	O
ATOM	1468	CB	LEU	A	507	10.181	10.891	27.265	1.00	19.48	C
ATOM	1469	CG	LEU	A	507	9.165	10.148	28.158	1.00	26.42	C
ATOM	1470	CD1	LEU	A	507	8.420	9.135	27.311	1.00	28.63	C
ATOM	1471	CD2	LEU	A	507	9.853	9.479	29.339	1.00	25.64	C
ATOM	1472	N	MET	A	508	11.877	13.849	26.818	1.00	16.93	N
ATOM	1473	CA	MET	A	508	12.986	14.496	26.123	1.00	23.08	C
ATOM	1474	C	MET	A	508	14.076	14.811	27.154	1.00	28.54	C
ATOM	1475	O	MET	A	508	15.265	14.820	26.855	1.00	23.86	O
ATOM	1476	CB	MET	A	508	12.603	15.865	25.438	1.00	26.46	C
ATOM	1477	CG	MET	A	508	12.016	15.450	24.036	1.00	23.87	C
ATOM	1478	SD	MET	A	508	11.715	17.040	23.204	1.00	27.80	S
ATOM	1479	CE	MET	A	508	10.678	17.924	24.359	1.00	30.56	C
ATOM	1480	N	LEU	A	509	13.694	15.107	28.395	1.00	25.05	N
ATOM	1481	CA	LEU	A	509	14.653	15.377	29.477	1.00	27.05	C
ATOM	1482	C	LEU	A	509	15.476	14.184	29.885	1.00	22.15	C
ATOM	1483	O	LEU	A	509	16.562	14.328	30.484	1.00	26.84	O
ATOM	1484	CB	LEU	A	509	13.929	15.907	30.716	1.00	28.80	C
ATOM	1485	CG	LEU	A	509	13.620	17.398	30.651	1.00	35.21	C
ATOM	1486	CD1	LEU	A	509	12.905	17.767	31.920	1.00	32.29	C
ATOM	1487	CD2	LEU	A	509	14.902	18.188	30.394	1.00	36.14	C
ATOM	1488	N	LEU	A	510	15.101	12.954	29.602	1.00	22.10	N
ATOM	1489	CA	LEU	A	510	15.847	11.731	29.817	1.00	31.30	C
ATOM	1490	C	LEU	A	510	17.152	11.661	29.004	1.00	27.86	C
ATOM	1491	O	LEU	A	510	18.184	11.107	29.461	1.00	25.83	O
ATOM	1492	CB	LEU	A	510	15.009	10.509	29.533	1.00	32.50	C
ATOM	1493	CG	LEU	A	510	14.041	10.070	30.659	1.00	37.86	C
ATOM	1494	CD1	LEU	A	510	14.036	8.558	30.650	1.00	33.60	C
ATOM	1495	CD2	LEU	A	510	14.409	10.625	32.030	1.00	41.89	C
ATOM	1496	N	SER	A	511	17.164	12.332	27.846	1.00	21.01	N
ATOM	1497	CA	SER	A	511	18.407	12.412	27.088	1.00	19.52	C
ATOM	1498	C	SER	A	511	19.356	13.350	27.853	1.00	20.33	C
ATOM	1499	O	SER	A	511	20.578	13.174	27.756	1.00	19.80	O
ATOM	1500	CB	SER	A	511	18.054	13.094	25.749	1.00	21.91	C
ATOM	1501	OG	SER	A	511	17.353	12.110	24.988	1.00	27.19	O
ATOM	1502	N	HIS	A	512	18.820	14.337	28.598	1.00	17.00	N
ATOM	1503	CA	HIS	A	512	19.675	15.265	29.350	1.00	17.20	C
ATOM	1504	C	HIS	A	512	20.310	14.488	30.520	1.00	18.30	C
ATOM	1505	O	HIS	A	512	21.462	14.726	30.897	1.00	18.47	O
ATOM	1506	CB	HIS	A	512	18.901	16.482	29.781	1.00	22.31	C
ATOM	1507	CG	HIS	A	512	18.468	17.393	28.645	1.00	27.23	C
ATOM	1508	ND1	HIS	A	512	18.601	18.755	28.801	1.00	30.72	N
ATOM	1509	CD2	HIS	A	512	17.899	17.200	27.450	1.00	32.28	C
ATOM	1510	CE1	HIS	A	512	18.129	19.363	27.717	1.00	33.98	C
ATOM	1511	NE2	HIS	A	512	17.705	18.450	26.873	1.00	27.65	N
ATOM	1512	N	VAL	A	513	19.477	13.666	31.181	1.00	18.12	N
ATOM	1513	CA	VAL	A	513	19.990	12.851	32.290	1.00	22.72	C
ATOM	1514	C	VAL	A	513	21.030	11.881	31.730	1.00	20.91	C
ATOM	1515	O	VAL	A	513	22.097	11.700	32.335	1.00	20.66	O
ATOM	1516	CB	VAL	A	513	18.847	12.145	33.064	1.00	22.88	C
ATOM	1517	CG1	VAL	A	513	19.459	11.526	34.341	1.00	23.18	C
ATOM	1518	CG2	VAL	A	513	17.778	13.131	33.458	1.00	20.14	C
ATOM	1519	N	ARG	A	514	20.876	11.298	30.545	1.00	19.00	N
ATOM	1520	CA	ARG	A	514	21.899	10.441	29.925	1.00	20.34	C
ATOM	1521	C	ARG	A	514	23.173	11.232	29.640	1.00	20.91	C
ATOM	1522	O	ARG	A	514	24.289	10.721	29.911	1.00	18.76	O
ATOM	1523	CB	ARG	A	514	21.354	9.808	28.623	1.00	18.63	C
ATOM	1524	CG	ARG	A	514	22.254	8.874	27.840	1.00	22.80	C
ATOM	1525	CD	ARG	A	514	22.365	7.479	28.524	1.00	30.40	C
ATOM	1526	NE	ARG	A	514	21.077	6.785	28.263	1.00	34.94	N
ATOM	1527	CZ	ARG	A	514	20.885	5.873	27.310	1.00	36.49	C
ATOM	1528	NH1	ARG	A	514	21.890	5.517	26.538	1.00	35.79	N
ATOM	1529	NH2	ARG	A	514	19.683	5.346	27.147	1.00	41.59	N
ATOM	1530	N	HIS	A	515	23.056	12.440	29.151	1.00	18.76	N
ATOM	1531	CA	HIS	A	515	24.205	13.313	28.810	1.00	21.44	C
ATOM	1532	C	HIS	A	515	25.011	13.540	30.105	1.00	18.96	C
ATOM	1533	O	HIS	A	515	26.244	13.432	30.147	1.00	17.34	O

ATOM	1534	CB	HIS	A	515	23.755	14.646	28.186	1.00	20.53	C
ATOM	1535	CG	HIS	A	515	24.880	15.556	27.748	1.00	25.29	C
ATOM	1536	ND1	HIS	A	515	25.296	16.581	28.585	1.00	35.84	N
ATOM	1537	CD2	HIS	A	515	25.726	15.642	26.703	1.00	29.95	C
ATOM	1538	CE1	HIS	A	515	26.312	17.249	28.046	1.00	32.66	C
ATOM	1539	NE2	HIS	A	515	26.606	16.696	26.909	1.00	26.95	N
ATOM	1540	N	ALA	A	516	24.275	13.854	31.185	1.00	18.30	N
ATOM	1541	CA	ALA	A	516	24.996	14.120	32.445	1.00	18.51	C
ATOM	1542	C	ALA	A	516	25.711	12.871	32.896	1.00	16.96	C
ATOM	1543	O	ALA	A	516	26.824	12.971	33.458	1.00	17.97	O
ATOM	1544	CB	ALA	A	516	23.976	14.626	33.499	1.00	17.16	C
ATOM	1545	N	SER	A	517	25.037	11.721	32.775	1.00	13.23	N
ATOM	1546	CA	SER	A	517	25.702	10.469	33.226	1.00	15.19	C
ATOM	1547	C	SER	A	517	26.931	10.196	32.386	1.00	19.61	C
ATOM	1548	O	SER	A	517	27.959	9.748	32.898	1.00	16.73	O
ATOM	1549	CB	SER	A	517	24.651	9.355	33.164	1.00	20.28	C
ATOM	1550	OG	SER	A	517	24.221	8.924	31.883	1.00	35.94	O
ATOM	1551	N	ASN	A	518	26.850	10.393	31.069	1.00	15.58	N
ATOM	1552	CA	ASN	A	518	28.059	10.099	30.252	1.00	17.67	C
ATOM	1553	C	ASN	A	518	29.163	11.108	30.623	1.00	19.64	C
ATOM	1554	O	ASN	A	518	30.335	10.742	30.682	1.00	18.53	O
ATOM	1555	CB	ASN	A	518	27.733	10.366	28.774	1.00	19.79	C
ATOM	1556	CG	ASN	A	518	26.808	9.340	28.118	1.00	29.86	C
ATOM	1557	OD1	ASN	A	518	26.142	9.822	27.189	1.00	31.32	O
ATOM	1558	ND2	ASN	A	518	26.903	8.120	28.634	1.00	29.79	N
ATOM	1559	N	LYS	A	519	28.774	12.388	30.869	1.00	18.99	N
ATOM	1560	CA	LYS	A	519	29.861	13.324	31.222	1.00	19.79	C
ATOM	1561	C	LYS	A	519	30.474	12.933	32.560	1.00	22.35	C
ATOM	1562	O	LYS	A	519	31.692	13.041	32.810	1.00	19.90	O
ATOM	1563	CB	LYS	A	519	29.351	14.774	31.166	1.00	20.32	C
ATOM	1564	CG	LYS	A	519	28.748	15.191	29.831	1.00	29.40	C
ATOM	1565	CD	LYS	A	519	29.562	14.820	28.603	1.00	40.46	C
ATOM	1566	CE	LYS	A	519	30.943	15.429	28.663	1.00	43.73	C
ATOM	1567	NZ	LYS	A	519	30.945	16.821	29.190	1.00	52.15	N
ATOM	1568	N	GLY	A	520	29.640	12.570	33.550	1.00	19.78	N
ATOM	1569	CA	GLY	A	520	30.068	12.129	34.849	1.00	21.87	C
ATOM	1570	C	GLY	A	520	30.951	10.892	34.772	1.00	20.42	C
ATOM	1571	O	GLY	A	520	31.990	10.889	35.452	1.00	20.49	O
ATOM	1572	N	MET	A	521	30.641	9.931	33.866	1.00	17.39	N
ATOM	1573	CA	MET	A	521	31.494	8.751	33.761	1.00	20.77	C
ATOM	1574	C	MET	A	521	32.854	9.090	33.132	1.00	22.09	C
ATOM	1575	O	MET	A	521	33.874	8.495	33.496	1.00	25.57	O
ATOM	1576	CB	MET	A	521	30.859	7.661	32.894	1.00	21.70	C
ATOM	1577	CG	MET	A	521	29.597	7.087	33.542	1.00	22.12	C
ATOM	1578	SD	MET	A	521	29.941	6.202	35.059	1.00	25.78	S
ATOM	1579	CE	MET	A	521	30.966	4.858	34.483	1.00	34.57	C
ATOM	1580	N	GLU	A	522	32.821	10.026	32.210	1.00	19.77	N
ATOM	1581	CA	GLU	A	522	34.082	10.475	31.567	1.00	25.22	C
ATOM	1582	C	GLU	A	522	34.992	11.125	32.617	1.00	27.04	C
ATOM	1583	O	GLU	A	522	36.222	10.925	32.674	1.00	25.63	O
ATOM	1584	CB	GLU	A	522	33.737	11.549	30.540	1.00	28.85	C
ATOM	1585	CG	GLU	A	522	34.963	11.924	29.709	1.00	38.45	C
ATOM	1586	CD	GLU	A	522	34.586	12.775	28.502	1.00	42.28	C
ATOM	1587	OE1	GLU	A	522	33.522	13.439	28.455	1.00	42.42	O
ATOM	1588	OE2	GLU	A	522	35.398	12.792	27.558	1.00	44.02	O
ATOM	1589	N	HIS	A	523	34.365	11.986	33.411	1.00	25.50	N
ATOM	1590	CA	HIS	A	523	35.072	12.655	34.496	1.00	25.58	C
ATOM	1591	C	HIS	A	523	35.612	11.652	35.497	1.00	27.34	C
ATOM	1592	O	HIS	A	523	36.771	11.815	35.999	1.00	26.33	O
ATOM	1593	CB	HIS	A	523	34.136	13.679	35.140	1.00	21.63	C
ATOM	1594	CG	HIS	A	523	34.806	14.412	36.272	1.00	24.67	C
ATOM	1595	ND1	HIS	A	523	34.739	14.029	37.579	1.00	29.47	N
ATOM	1596	CD2	HIS	A	523	35.574	15.543	36.198	1.00	29.20	C
ATOM	1597	CE1	HIS	A	523	35.458	14.901	38.312	1.00	29.69	C
ATOM	1598	NE2	HIS	A	523	35.964	15.828	37.492	1.00	28.98	N
ATOM	1599	N	LEU	A	524	34.832	10.630	35.885	1.00	23.61	N
ATOM	1600	CA	LEU	A	524	35.316	9.624	36.806	1.00	25.30	C
ATOM	1601	C	LEU	A	524	36.493	8.821	36.262	1.00	29.29	C
ATOM	1602	O	LEU	A	524	37.517	8.568	36.943	1.00	25.59	O
ATOM	1603	CB	LEU	A	524	34.121	8.699	37.151	1.00	22.60	C
ATOM	1604	CG	LEU	A	524	34.407	7.594	38.141	1.00	26.13	C
ATOM	1605	CD1	LEU	A	524	35.007	8.077	39.469	1.00	23.83	C
ATOM	1606	CD2	LEU	A	524	33.118	6.810	38.416	1.00	26.40	C
ATOM	1607	N	LEU	A	525	36.388	8.450	34.978	1.00	26.41	N
ATOM	1608	CA	LEU	A	525	37.508	7.752	34.317	1.00	29.31	C
ATOM	1609	C	LEU	A	525	38.733	8.665	34.330	1.00	26.40	C
ATOM	1610	O	LEU	A	525	39.855	8.175	34.538	1.00	33.34	O

ATOM	1611	CB	LEU	A	525	37.125	7.485	32.859	1.00	30.24	C
ATOM	1612	CG	LEU	A	525	38.261	6.885	32.008	1.00	35.53	C
ATOM	1613	CD1	LEU	A	525	38.603	5.515	32.560	1.00	33.00	C
ATOM	1614	CD2	LEU	A	525	37.813	6.926	30.556	1.00	38.35	C
ATOM	1615	N	ASN	A	526	38.585	9.964	34.173	1.00	28.04	N
ATOM	1616	CA	ASN	A	526	39.739	10.879	34.195	1.00	32.60	C
ATOM	1617	C	ASN	A	526	40.314	10.939	35.601	1.00	37.85	C
ATOM	1618	O	ASN	A	526	41.544	10.831	35.827	1.00	32.78	O
ATOM	1619	CB	ASN	A	526	39.404	12.184	33.509	1.00	41.07	C
ATOM	1620	CG	ASN	A	526	39.453	12.066	31.989	1.00	49.96	C
ATOM	1621	OD1	ASN	A	526	40.312	11.382	31.400	1.00	47.80	O
ATOM	1622	ND2	ASN	A	526	38.548	12.701	31.238	1.00	52.37	N
ATOM	1623	N	MET	A	527	39.459	10.912	36.620	1.00	28.88	N
ATOM	1624	CA	MET	A	527	39.892	10.932	38.016	1.00	31.09	C
ATOM	1625	C	MET	A	527	40.665	9.681	38.371	1.00	29.41	C
ATOM	1626	O	MET	A	527	41.583	9.730	39.228	1.00	31.63	O
ATOM	1627	CB	MET	A	527	38.737	11.111	38.996	1.00	30.94	C
ATOM	1628	CG	MET	A	527	38.123	12.480	39.050	1.00	32.25	C
ATOM	1629	SD	MET	A	527	39.273	13.812	39.490	1.00	38.32	S
ATOM	1630	CE	MET	A	527	39.552	14.517	37.876	1.00	42.34	C
ATOM	1631	N	LYS	A	528	40.260	8.580	37.788	1.00	29.65	N
ATOM	1632	CA	LYS	A	528	40.898	7.290	37.996	1.00	33.35	C
ATOM	1633	C	LYS	A	528	42.250	7.321	37.261	1.00	40.21	C
ATOM	1634	O	LYS	A	528	43.214	6.736	37.778	1.00	35.78	O
ATOM	1635	CB	LYS	A	528	40.042	6.128	37.542	1.00	33.72	C
ATOM	1636	CG	LYS	A	528	40.665	4.749	37.628	1.00	43.74	C
ATOM	1637	CD	LYS	A	528	41.195	4.294	36.273	1.00	46.75	C
ATOM	1638	CE	LYS	A	528	41.618	2.830	36.366	1.00	53.32	C
ATOM	1639	NZ	LYS	A	528	41.249	2.097	35.117	1.00	59.40	N
ATOM	1640	N	CYS	A	529	42.290	7.989	36.107	1.00	36.42	N
ATOM	1641	CA	CYS	A	529	43.556	8.114	35.386	1.00	45.49	C
ATOM	1642	C	CYS	A	529	44.505	9.085	36.089	1.00	44.41	C
ATOM	1643	O	CYS	A	529	45.739	8.956	35.943	1.00	46.54	O
ATOM	1644	CB	CYS	A	529	43.361	8.551	33.933	1.00	45.99	C
ATOM	1645	SG	CYS	A	529	42.538	7.282	32.929	1.00	54.11	S
ATOM	1646	N	LYS	A	530	44.020	10.057	36.840	1.00	41.40	N
ATOM	1647	CA	LYS	A	530	44.865	10.985	37.583	1.00	42.22	C
ATOM	1648	C	LYS	A	530	45.317	10.356	38.907	1.00	41.34	C
ATOM	1649	O	LYS	A	530	45.983	10.964	39.741	1.00	42.74	O
ATOM	1650	CB	LYS	A	530	44.181	12.315	37.843	1.00	47.78	C
ATOM	1651	CG	LYS	A	530	44.062	13.248	36.639	1.00	54.93	C
ATOM	1652	CD	LYS	A	530	43.608	14.622	37.112	1.00	59.63	C
ATOM	1653	CE	LYS	A	530	42.681	15.306	36.131	1.00	62.07	C
ATOM	1654	NZ	LYS	A	530	41.996	16.471	36.772	1.00	66.71	N
ATOM	1655	N	ASN	A	531	44.862	9.159	39.207	1.00	33.96	N
ATOM	1656	CA	ASN	A	531	45.071	8.329	40.356	1.00	36.95	C
ATOM	1657	C	ASN	A	531	44.447	8.962	41.597	1.00	37.21	C
ATOM	1658	O	ASN	A	531	44.861	8.759	42.729	1.00	34.97	O
ATOM	1659	CB	ASN	A	531	46.555	8.010	40.595	1.00	41.21	C
ATOM	1660	CG	ASN	A	531	46.755	6.889	41.590	1.00	42.51	C
ATOM	1661	OD1	ASN	A	531	46.222	5.783	41.548	1.00	44.47	O
ATOM	1662	ND2	ASN	A	531	47.618	7.161	42.564	1.00	45.94	N
ATOM	1663	N	VAL	A	532	43.380	9.713	41.376	1.00	33.14	N
ATOM	1664	CA	VAL	A	532	42.609	10.393	42.420	1.00	33.52	C
ATOM	1665	C	VAL	A	532	41.657	9.407	43.078	1.00	30.82	C
ATOM	1666	O	VAL	A	532	41.314	9.513	44.269	1.00	32.78	O
ATOM	1667	CB	VAL	A	532	41.893	11.631	41.888	1.00	30.67	C
ATOM	1668	CG1	VAL	A	532	41.012	12.351	42.894	1.00	30.77	C
ATOM	1669	CG2	VAL	A	532	42.905	12.624	41.305	1.00	33.95	C
ATOM	1670	N	VAL	A	533	41.163	8.425	42.334	1.00	28.16	N
ATOM	1671	CA	VAL	A	533	40.301	7.405	42.880	1.00	28.57	C
ATOM	1672	C	VAL	A	533	40.833	6.084	42.358	1.00	30.48	C
ATOM	1673	O	VAL	A	533	41.461	6.090	41.297	1.00	34.29	O
ATOM	1674	CB	VAL	A	533	38.796	7.497	42.507	1.00	26.23	C
ATOM	1675	CG1	VAL	A	533	38.190	8.771	43.058	1.00	25.81	C
ATOM	1676	CG2	VAL	A	533	38.655	7.456	40.990	1.00	27.14	C
ATOM	1677	N	PRO	A	534	40.532	4.992	43.030	1.00	33.55	N
ATOM	1678	CA	PRO	A	534	40.998	3.686	42.641	1.00	34.79	C
ATOM	1679	C	PRO	A	534	40.315	2.988	41.494	1.00	40.51	C
ATOM	1680	O	PRO	A	534	40.942	2.279	40.685	1.00	40.19	O
ATOM	1681	CB	PRO	A	534	40.796	2.868	43.926	1.00	38.33	C
ATOM	1682	CG	PRO	A	534	39.740	3.556	44.711	1.00	35.85	C
ATOM	1683	CD	PRO	A	534	39.829	5.017	44.357	1.00	35.36	C
ATOM	1684	N	VAL	A	535	38.971	3.074	41.407	1.00	31.84	N
ATOM	1685	CA	VAL	A	535	38.265	2.375	40.373	1.00	34.53	C
ATOM	1686	C	VAL	A	535	37.284	3.306	39.646	1.00	35.56	C
ATOM	1687	O	VAL	A	535	36.844	4.334	40.129	1.00	32.66	O

ATOM	1688	CB	VAL	A	535	37.472	1.166	40.914	1.00	42.03	C
ATOM	1689	CG1	VAL	A	535	38.378	0.016	41.335	1.00	41.96	C
ATOM	1690	CG2	VAL	A	535	36.618	1.636	42.077	1.00	41.40	C
ATOM	1691	N	TYR	A	536	37.031	2.914	38.422	1.00	38.81	N
ATOM	1692	CA	TYR	A	536	36.127	3.630	37.526	1.00	37.76	C
ATOM	1693	C	TYR	A	536	34.753	2.987	37.622	1.00	33.11	C
ATOM	1694	O	TYR	A	536	33.713	3.680	37.734	1.00	30.18	O
ATOM	1695	CB	TYR	A	536	36.730	3.510	36.113	1.00	39.43	C
ATOM	1696	CG	TYR	A	536	35.776	3.844	34.993	1.00	36.84	C
ATOM	1697	CD1	TYR	A	536	35.249	5.129	34.853	1.00	40.40	C
ATOM	1698	CD2	TYR	A	536	35.390	2.860	34.093	1.00	37.43	C
ATOM	1699	CE1	TYR	A	536	34.367	5.418	33.812	1.00	37.67	C
ATOM	1700	CE2	TYR	A	536	34.509	3.147	33.062	1.00	36.97	C
ATOM	1701	CZ	TYR	A	536	34.025	4.430	32.910	1.00	41.30	C
ATOM	1702	OH	TYR	A	536	33.141	4.693	31.877	1.00	41.15	O
ATOM	1703	N	ASP	A	537	34.752	1.656	37.547	1.00	28.09	N
ATOM	1704	CA	ASP	A	537	33.513	0.889	37.580	1.00	31.30	C
ATOM	1705	C	ASP	A	537	33.048	0.696	39.012	1.00	29.04	C
ATOM	1706	O	ASP	A	537	33.279	-0.344	39.625	1.00	25.67	O
ATOM	1707	CB	ASP	A	537	33.576	-0.430	36.807	1.00	35.55	C
ATOM	1708	CG	ASP	A	537	32.198	-1.027	36.548	1.00	42.06	C
ATOM	1709	OD1	ASP	A	537	31.230	-0.697	37.278	1.00	35.88	O
ATOM	1710	OD2	ASP	A	537	32.045	-1.830	35.593	1.00	44.18	O
ATOM	1711	N	LEU	A	538	32.285	1.690	39.496	1.00	27.09	N
ATOM	1712	CA	LEU	A	538	31.736	1.612	40.853	1.00	25.60	C
ATOM	1713	C	LEU	A	538	30.744	0.503	41.053	1.00	23.74	C
ATOM	1714	O	LEU	A	538	30.667	0.038	42.199	1.00	24.81	O
ATOM	1715	CB	LEU	A	538	31.116	2.942	41.272	1.00	24.14	C
ATOM	1716	CG	LEU	A	538	32.055	4.155	41.069	1.00	23.55	C
ATOM	1717	CD1	LEU	A	538	31.387	5.388	41.650	1.00	22.07	C
ATOM	1718	CD2	LEU	A	538	33.417	3.877	41.706	1.00	25.28	C
ATOM	1719	N	LEU	A	539	29.991	0.086	40.044	1.00	24.40	N
ATOM	1720	CA	LEU	A	539	29.082	-1.035	40.197	1.00	25.24	C
ATOM	1721	C	LEU	A	539	29.907	-2.329	40.450	1.00	21.34	C
ATOM	1722	O	LEU	A	539	29.600	-3.010	41.403	1.00	27.46	O
ATOM	1723	CB	LEU	A	539	28.165	-1.180	38.970	1.00	22.82	C
ATOM	1724	CG	LEU	A	539	27.298	-2.427	38.999	1.00	25.22	C
ATOM	1725	CD1	LEU	A	539	26.383	-2.463	40.212	1.00	23.54	C
ATOM	1726	CD2	LEU	A	539	26.489	-2.512	37.687	1.00	26.32	C
ATOM	1727	N	LEU	A	540	30.889	-2.564	39.616	1.00	24.92	N
ATOM	1728	CA	LEU	A	540	31.808	-3.717	39.812	1.00	31.88	C
ATOM	1729	C	LEU	A	540	32.518	-3.655	41.163	1.00	30.52	C
ATOM	1730	O	LEU	A	540	32.598	-4.650	41.875	1.00	33.31	O
ATOM	1731	CB	LEU	A	540	32.829	-3.697	38.666	1.00	29.45	C
ATOM	1732	CG	LEU	A	540	33.861	-4.865	38.710	1.00	37.60	C
ATOM	1733	CD1	LEU	A	540	33.184	-6.206	38.876	1.00	36.10	C
ATOM	1734	CD2	LEU	A	540	34.700	-4.809	37.449	1.00	39.88	C
ATOM	1735	N	GLU	A	541	33.018	-2.494	41.579	1.00	32.71	N
ATOM	1736	CA	GLU	A	541	33.658	-2.334	42.881	1.00	31.44	C
ATOM	1737	C	GLU	A	541	32.698	-2.709	44.015	1.00	30.48	C
ATOM	1738	O	GLU	A	541	33.067	-3.302	45.012	1.00	33.64	O
ATOM	1739	CB	GLU	A	541	34.190	-0.926	43.146	1.00	35.85	C
ATOM	1740	CG	GLU	A	541	35.058	-0.841	44.410	1.00	42.38	C
ATOM	1741	CD	GLU	A	541	36.133	-1.934	44.373	1.00	47.06	C
ATOM	1742	OE1	GLU	A	541	36.994	-1.908	43.484	1.00	46.54	O
ATOM	1743	OE2	GLU	A	541	36.120	-2.860	45.210	1.00	53.26	O
ATOM	1744	N	MET	A	542	31.440	-2.244	43.953	1.00	25.53	N
ATOM	1745	CA	MET	A	542	30.427	-2.556	44.905	1.00	25.12	C
ATOM	1746	C	MET	A	542	30.201	-4.072	45.019	1.00	28.01	C
ATOM	1747	O	MET	A	542	30.232	-4.626	46.114	1.00	29.02	O
ATOM	1748	CB	MET	A	542	29.074	-1.863	44.632	1.00	23.97	C
ATOM	1749	CG	MET	A	542	28.085	-2.113	45.753	1.00	22.61	C
ATOM	1750	SD	MET	A	542	27.112	-3.597	45.520	1.00	27.90	S
ATOM	1751	CE	MET	A	542	26.106	-3.241	44.082	1.00	26.51	C
ATOM	1752	N	LEU	A	543	29.975	-4.730	43.893	1.00	27.93	N
ATOM	1753	CA	LEU	A	543	29.789	-6.177	43.882	1.00	37.51	C
ATOM	1754	C	LEU	A	543	31.077	-6.907	44.305	1.00	29.29	C
ATOM	1755	O	LEU	A	543	30.992	-8.002	44.851	1.00	40.69	O
ATOM	1756	CB	LEU	A	543	29.394	-6.592	42.468	1.00	35.84	C
ATOM	1757	CG	LEU	A	543	27.999	-6.116	42.022	1.00	39.20	C
ATOM	1758	CD1	LEU	A	543	27.844	-6.273	40.513	1.00	37.50	C
ATOM	1759	CD2	LEU	A	543	26.964	-6.890	42.819	1.00	39.03	C
ATOM	1760	N	ASN	A	544	32.251	-6.388	44.020	1.00	36.39	N
ATOM	1761	CA	ASN	A	544	33.450	-7.147	44.460	1.00	38.48	C
ATOM	1762	C	ASN	A	544	33.631	-7.064	45.960	1.00	43.50	C
ATOM	1763	O	ASN	A	544	33.883	-8.067	46.657	1.00	42.84	O
ATOM	1764	CB	ASN	A	544	34.624	-6.686	43.612	1.00	45.08	C

ATOM	1765	CG	ASN	A	544	34.582	-7.357	42.246	1.00	44.51	C
ATOM	1766	OD1	ASN	A	544	35.290	-6.838	41.385	1.00	51.67	O
ATOM	1767	ND2	ASN	A	544	33.838	-8.437	42.089	1.00	51.31	N
ATOM	1768	N	ALA	A	545	33.361	-5.926	46.585	1.00	40.45	N
ATOM	1769	CA	ALA	A	545	33.453	-5.756	48.021	1.00	38.08	C
ATOM	1770	C	ALA	A	545	32.268	-6.193	48.848	1.00	37.95	C
ATOM	1771	O	ALA	A	545	32.444	-6.329	50.078	1.00	47.01	O
ATOM	1772	CB	ALA	A	545	33.672	-4.257	48.315	1.00	36.01	C
ATOM	1773	N	HIS	A	546	31.048	-6.361	48.386	1.00	31.25	N
ATOM	1774	CA	HIS	A	546	29.911	-6.714	49.206	1.00	32.20	C
ATOM	1775	C	HIS	A	546	29.653	-8.214	49.109	1.00	38.99	C
ATOM	1776	O	HIS	A	546	29.988	-8.799	48.073	1.00	34.48	O
ATOM	1777	CB	HIS	A	546	28.664	-5.875	48.914	1.00	35.48	C
ATOM	1778	CG	HIS	A	546	28.866	-4.431	49.329	1.00	30.08	C
ATOM	1779	ND1	HIS	A	546	28.295	-3.939	50.481	1.00	37.29	N
ATOM	1780	CD2	HIS	A	546	29.565	-3.435	48.771	1.00	34.54	C
ATOM	1781	CE1	HIS	A	546	28.660	-2.660	50.619	1.00	35.68	C
ATOM	1782	NE2	HIS	A	546	29.411	-2.339	49.593	1.00	33.94	N
ATOM	1783	N	VAL	A	547	29.150	-8.824	50.174	1.00	40.87	N
ATOM	1784	CA	VAL	A	547	28.935	-10.273	50.130	1.00	45.83	C
ATOM	1785	C	VAL	A	547	27.450	-10.597	50.207	1.00	48.59	C
ATOM	1786	O	VAL	A	547	26.638	-9.875	50.786	1.00	45.34	O
ATOM	1787	CB	VAL	A	547	29.786	-11.039	51.161	1.00	49.80	C
ATOM	1788	CG1	VAL	A	547	30.307	-10.158	52.287	1.00	51.09	C
ATOM	1789	CG2	VAL	A	547	29.123	-12.243	51.823	1.00	53.46	C
ATOM	1790	N	LEU	A	548	27.114	-11.681	49.496	1.00	43.35	N
ATOM	1791	CA	LEU	A	548	25.729	-12.160	49.515	1.00	47.89	C
ATOM	1792	C	LEU	A	548	25.376	-12.566	50.937	1.00	46.50	C
ATOM	1793	O	LEU	A	548	26.222	-13.151	51.608	1.00	45.59	O
ATOM	1794	CB	LEU	A	548	25.612	-13.387	48.594	1.00	45.45	C
ATOM	1795	CG	LEU	A	548	25.824	-13.036	47.118	1.00	49.38	C
ATOM	1796	CD1	LEU	A	548	26.029	-14.264	46.249	1.00	47.84	C
ATOM	1797	CD2	LEU	A	548	24.627	-12.232	46.615	1.00	48.16	C
ATOM	1798	N	ALA	A	549	24.188	-12.232	51.402	1.00	54.13	N
ATOM	1799	CA	ALA	A	549	23.752	-12.624	52.744	1.00	57.06	C
ATOM	1800	C	ALA	A	549	22.623	-13.653	52.585	1.00	56.83	C
ATOM	1801	O	ALA	A	549	22.740	-14.402	51.568	1.00	56.96	O
ATOM	1802	CB	ALA	A	549	23.319	-11.460	53.602	1.00	58.43	C
ATOM	1803	N	LEU	B	311	2.997	26.939	11.936	1.00	28.08	N
ATOM	1804	CA	LEU	B	311	3.288	25.890	12.956	1.00	33.81	C
ATOM	1805	C	LEU	B	311	2.220	24.823	13.099	1.00	36.64	C
ATOM	1806	O	LEU	B	311	2.422	23.943	13.941	1.00	35.73	O
ATOM	1807	CB	LEU	B	311	3.595	26.539	14.293	1.00	32.95	C
ATOM	1808	CG	LEU	B	311	4.849	27.406	14.305	1.00	33.74	C
ATOM	1809	CD1	LEU	B	311	4.950	28.130	15.644	1.00	36.98	C
ATOM	1810	CD2	LEU	B	311	6.095	26.598	14.019	1.00	34.94	C
ATOM	1811	N	SER	B	312	1.144	24.868	12.322	1.00	33.54	N
ATOM	1812	CA	SER	B	312	0.128	23.810	12.449	1.00	35.91	C
ATOM	1813	C	SER	B	312	0.830	22.540	11.976	1.00	31.76	C
ATOM	1814	O	SER	B	312	1.699	22.603	11.127	1.00	28.79	O
ATOM	1815	CB	SER	B	312	-1.113	24.179	11.641	1.00	37.81	C
ATOM	1816	OG	SER	B	312	-0.946	23.904	10.268	1.00	44.53	O
ATOM	1817	N	PRO	B	313	0.472	21.378	12.505	1.00	33.20	N
ATOM	1818	CA	PRO	B	313	1.160	20.130	12.176	1.00	29.36	C
ATOM	1819	C	PRO	B	313	1.374	19.809	10.726	1.00	30.45	C
ATOM	1820	O	PRO	B	313	2.500	19.515	10.291	1.00	28.30	O
ATOM	1821	CB	PRO	B	313	0.272	19.093	12.871	1.00	28.85	C
ATOM	1822	CG	PRO	B	313	-0.357	19.811	14.029	1.00	30.58	C
ATOM	1823	CD	PRO	B	313	-0.571	21.235	13.545	1.00	32.44	C
ATOM	1824	N	GLU	B	314	0.350	19.829	9.859	1.00	26.68	N
ATOM	1825	CA	GLU	B	314	0.570	19.471	8.458	1.00	28.47	C
ATOM	1826	C	GLU	B	314	1.575	20.360	7.714	1.00	26.99	C
ATOM	1827	O	GLU	B	314	2.441	19.927	6.942	1.00	30.41	O
ATOM	1828	CB	GLU	B	314	-0.788	19.492	7.734	1.00	35.34	C
ATOM	1829	CG	GLU	B	314	-0.667	19.284	6.226	1.00	39.69	C
ATOM	1830	CD	GLU	B	314	-2.047	18.819	5.717	1.00	47.00	C
ATOM	1831	OE1	GLU	B	314	-3.053	19.421	6.148	1.00	48.55	O
ATOM	1832	OE2	GLU	B	314	-2.071	17.867	4.941	1.00	44.66	O
ATOM	1833	N	GLN	B	315	1.475	21.643	7.937	1.00	26.38	N
ATOM	1834	CA	GLN	B	315	2.343	22.653	7.352	1.00	29.68	C
ATOM	1835	C	GLN	B	315	3.763	22.592	7.945	1.00	31.40	C
ATOM	1836	O	GLN	B	315	4.698	22.770	7.183	1.00	27.97	O
ATOM	1837	CB	GLN	B	315	1.778	24.030	7.722	1.00	34.22	C
ATOM	1838	CG	GLN	B	315	2.781	25.134	7.527	1.00	45.77	C
ATOM	1839	CD	GLN	B	315	2.388	26.515	7.980	1.00	56.80	C
ATOM	1840	OE1	GLN	B	315	3.047	27.482	7.546	1.00	61.06	O
ATOM	1841	NE2	GLN	B	315	1.343	26.636	8.806	1.00	59.90	N

ATOM	1842	N	LEU	B	316	3.844	22.320	9.266	1.00	26.87	N
ATOM	1843	CA	LEU	B	316	5.164	22.225	9.893	1.00	30.02	C
ATOM	1844	C	LEU	B	316	5.953	21.060	9.307	1.00	24.87	C
ATOM	1845	O	LEU	B	316	7.087	21.168	8.853	1.00	21.60	O
ATOM	1846	CB	LEU	B	316	5.082	22.171	11.419	1.00	30.22	C
ATOM	1847	CG	LEU	B	316	6.448	22.132	12.151	1.00	29.83	C
ATOM	1848	CD1	LEU	B	316	7.407	23.196	11.647	1.00	36.85	C
ATOM	1849	CD2	LEU	B	316	6.214	22.305	13.649	1.00	31.20	C
ATOM	1850	N	VAL	B	317	5.290	19.911	9.164	1.00	26.19	N
ATOM	1851	CA	VAL	B	317	5.910	18.754	8.555	1.00	25.93	C
ATOM	1852	C	VAL	B	317	6.283	19.026	7.095	1.00	26.19	C
ATOM	1853	O	VAL	B	317	7.335	18.608	6.592	1.00	26.56	O
ATOM	1854	CB	VAL	B	317	4.963	17.536	8.651	1.00	23.20	C
ATOM	1855	CG1	VAL	B	317	5.602	16.338	7.965	1.00	29.83	C
ATOM	1856	CG2	VAL	B	317	4.725	17.198	10.129	1.00	24.89	C
ATOM	1857	N	LEU	B	318	5.366	19.711	6.374	1.00	26.44	N
ATOM	1858	CA	LEU	B	318	5.715	20.004	4.961	1.00	25.87	C
ATOM	1859	C	LEU	B	318	6.993	20.864	4.939	1.00	21.42	C
ATOM	1860	O	LEU	B	318	7.871	20.601	4.105	1.00	26.99	O
ATOM	1861	CB	LEU	B	318	4.557	20.676	4.227	1.00	34.23	C
ATOM	1862	CG	LEU	B	318	4.729	20.919	2.721	1.00	43.62	C
ATOM	1863	CD1	LEU	B	318	5.709	19.980	2.035	1.00	43.77	C
ATOM	1864	CD2	LEU	B	318	3.321	20.817	2.110	1.00	50.90	C
ATOM	1865	N	THR	B	319	7.102	21.869	5.750	1.00	22.65	N
ATOM	1866	CA	THR	B	319	8.304	22.714	5.845	1.00	23.19	C
ATOM	1867	C	THR	B	319	9.527	21.880	6.190	1.00	24.51	C
ATOM	1868	O	THR	B	319	10.600	22.022	5.587	1.00	22.04	O
ATOM	1869	CB	THR	B	319	8.050	23.836	6.857	1.00	29.56	C
ATOM	1870	OG1	THR	B	319	6.938	24.585	6.281	1.00	31.39	O
ATOM	1871	CG2	THR	B	319	9.245	24.756	7.064	1.00	29.89	C
ATOM	1872	N	LEU	B	320	9.341	20.936	7.148	1.00	23.26	N
ATOM	1873	CA	LEU	B	320	10.491	20.067	7.476	1.00	21.50	C
ATOM	1874	C	LEU	B	320	10.894	19.211	6.299	1.00	22.15	C
ATOM	1875	O	LEU	B	320	12.092	19.033	6.062	1.00	24.21	O
ATOM	1876	CB	LEU	B	320	10.196	19.210	8.717	1.00	20.38	C
ATOM	1877	CG	LEU	B	320	9.900	19.993	9.996	1.00	23.03	C
ATOM	1878	CD1	LEU	B	320	9.548	19.072	11.165	1.00	25.32	C
ATOM	1879	CD2	LEU	B	320	11.194	20.775	10.338	1.00	27.97	C
ATOM	1880	N	LEU	B	321	9.926	18.679	5.537	1.00	23.98	N
ATOM	1881	CA	LEU	B	321	10.193	17.885	4.347	1.00	27.88	C
ATOM	1882	C	LEU	B	321	10.950	18.700	3.297	1.00	24.23	C
ATOM	1883	O	LEU	B	321	12.004	18.297	2.834	1.00	28.05	O
ATOM	1884	CB	LEU	B	321	8.953	17.279	3.665	1.00	32.25	C
ATOM	1885	CG	LEU	B	321	9.444	16.095	2.797	1.00	42.62	C
ATOM	1886	CD1	LEU	B	321	9.195	14.790	3.529	1.00	40.89	C
ATOM	1887	CD2	LEU	B	321	8.963	16.136	1.372	1.00	44.42	C
ATOM	1888	N	GLU	B	322	10.584	19.962	3.117	1.00	26.19	N
ATOM	1889	CA	GLU	B	322	11.273	20.866	2.204	1.00	33.17	C
ATOM	1890	C	GLU	B	322	12.650	21.304	2.681	1.00	37.53	C
ATOM	1891	O	GLU	B	322	13.557	21.573	1.874	1.00	34.01	O
ATOM	1892	CB	GLU	B	322	10.419	22.129	1.971	1.00	31.87	C
ATOM	1893	CG	GLU	B	322	9.136	21.886	1.212	1.00	45.26	C
ATOM	1894	CD	GLU	B	322	7.960	22.821	1.391	1.00	50.64	C
ATOM	1895	OE1	GLU	B	322	8.076	23.889	2.029	1.00	55.44	O
ATOM	1896	OE2	GLU	B	322	6.862	22.498	0.866	1.00	53.60	O
ATOM	1897	N	ALA	B	323	12.918	21.323	3.985	1.00	28.29	N
ATOM	1898	CA	ALA	B	323	14.165	21.776	4.551	1.00	28.43	C
ATOM	1899	C	ALA	B	323	15.262	20.723	4.563	1.00	23.34	C
ATOM	1900	O	ALA	B	323	16.407	21.056	4.918	1.00	23.98	O
ATOM	1901	CB	ALA	B	323	13.897	22.348	5.942	1.00	29.41	C
ATOM	1902	N	GLU	B	324	14.960	19.516	4.168	1.00	23.45	N
ATOM	1903	CA	GLU	B	324	15.866	18.397	4.182	1.00	23.91	C
ATOM	1904	C	GLU	B	324	17.077	18.646	3.323	1.00	27.63	C
ATOM	1905	O	GLU	B	324	16.940	19.001	2.143	1.00	25.43	O
ATOM	1906	CB	GLU	B	324	15.176	17.118	3.748	1.00	26.75	C
ATOM	1907	CG	GLU	B	324	14.482	16.319	4.833	1.00	30.12	C
ATOM	1908	CD	GLU	B	324	15.459	15.784	5.884	1.00	27.37	C
ATOM	1909	OE1	GLU	B	324	15.687	16.472	6.899	1.00	27.33	O
ATOM	1910	OE2	GLU	B	324	15.984	14.678	5.715	1.00	32.31	O
ATOM	1911	N	PRO	B	325	18.260	18.474	3.861	1.00	27.81	N
ATOM	1912	CA	PRO	B	325	19.459	18.676	3.077	1.00	30.04	C
ATOM	1913	C	PRO	B	325	19.550	17.819	1.827	1.00	27.05	C
ATOM	1914	O	PRO	B	325	19.174	16.649	1.832	1.00	30.82	O
ATOM	1915	CB	PRO	B	325	20.579	18.211	4.025	1.00	33.29	C
ATOM	1916	CG	PRO	B	325	20.014	18.290	5.394	1.00	32.61	C
ATOM	1917	CD	PRO	B	325	18.528	18.063	5.279	1.00	26.80	C
ATOM	1918	N	PRO	B	326	20.333	18.312	0.858	1.00	31.94	N

ATOM	1919	CA	PRO	B	326	20.577	17.563	-0.370	1.00	34.47	C
ATOM	1920	C	PRO	B	326	21.499	16.404	-0.021	1.00	36.74	C
ATOM	1921	O	PRO	B	326	22.182	16.514	1.023	1.00	28.88	O
ATOM	1922	CB	PRO	B	326	21.322	18.603	-1.220	1.00	33.99	C
ATOM	1923	CG	PRO	B	326	21.992	19.512	-0.229	1.00	36.09	C
ATOM	1924	CD	PRO	B	326	20.811	19.708	0.745	1.00	31.99	C
ATOM	1925	N	HIS	B	327	21.672	15.369	-0.845	1.00	33.12	N
ATOM	1926	CA	HIS	B	327	22.639	14.326	-0.519	1.00	35.27	C
ATOM	1927	C	HIS	B	327	24.059	14.891	-0.698	1.00	34.67	C
ATOM	1928	O	HIS	B	327	24.280	15.813	-1.510	1.00	30.20	O
ATOM	1929	CB	HIS	B	327	22.500	13.130	-1.458	1.00	44.84	C
ATOM	1930	CG	HIS	B	327	21.173	12.440	-1.478	1.00	52.21	C
ATOM	1931	ND1	HIS	B	327	20.053	13.005	-2.048	1.00	56.60	N
ATOM	1932	CD2	HIS	B	327	20.780	11.225	-1.026	1.00	53.45	C
ATOM	1933	CE1	HIS	B	327	19.026	12.173	-1.943	1.00	58.32	C
ATOM	1934	NE2	HIS	B	327	19.450	11.084	-1.326	1.00	55.20	N
ATOM	1935	N	VAL	B	328	24.998	14.343	0.058	1.00	26.84	N
ATOM	1936	CA	VAL	B	328	26.407	14.756	-0.017	1.00	29.87	C
ATOM	1937	C	VAL	B	328	27.150	13.684	-0.834	1.00	35.70	C
ATOM	1938	O	VAL	B	328	26.920	12.470	-0.768	1.00	37.59	O
ATOM	1939	CB	VAL	B	328	27.102	14.983	1.329	1.00	38.42	C
ATOM	1940	CG1	VAL	B	328	28.608	15.126	1.202	1.00	40.42	C
ATOM	1941	CG2	VAL	B	328	26.570	16.241	2.013	1.00	36.69	C
ATOM	1942	N	LEU	B	329	28.108	14.161	-1.629	1.00	31.23	N
ATOM	1943	CA	LEU	B	329	28.901	13.208	-2.428	1.00	36.50	C
ATOM	1944	C	LEU	B	329	30.317	13.139	-1.856	1.00	33.10	C
ATOM	1945	O	LEU	B	329	30.967	14.166	-1.773	1.00	27.72	O
ATOM	1946	CB	LEU	B	329	29.040	13.675	-3.866	1.00	39.45	C
ATOM	1947	CG	LEU	B	329	27.970	14.691	-4.259	1.00	45.22	C
ATOM	1948	CD1	LEU	B	329	28.564	15.941	-4.921	1.00	51.61	C
ATOM	1949	CD2	LEU	B	329	26.920	14.056	-5.142	1.00	48.87	C
ATOM	1950	N	ILE	B	330	30.704	11.973	-1.413	1.00	32.02	N
ATOM	1951	CA	ILE	B	330	32.040	11.727	-0.878	1.00	31.90	C
ATOM	1952	C	ILE	B	330	32.277	10.263	-1.213	1.00	30.64	C
ATOM	1953	O	ILE	B	330	31.317	9.475	-1.174	1.00	29.62	O
ATOM	1954	CB	ILE	B	330	32.173	12.091	0.599	1.00	31.89	C
ATOM	1955	CG1	ILE	B	330	33.622	12.184	1.039	1.00	38.77	C
ATOM	1956	CG2	ILE	B	330	31.427	11.097	1.485	1.00	34.48	C
ATOM	1957	CD1	ILE	B	330	33.898	12.836	2.371	1.00	36.86	C
ATOM	1958	N	SER	B	331	33.481	9.916	-1.636	1.00	30.39	N
ATOM	1959	CA	SER	B	331	33.763	8.514	-1.991	1.00	30.31	C
ATOM	1960	C	SER	B	331	34.935	8.017	-1.147	1.00	28.82	C
ATOM	1961	O	SER	B	331	35.624	8.891	-0.621	1.00	33.08	O
ATOM	1962	CB	SER	B	331	34.269	8.445	-3.451	1.00	36.40	C
ATOM	1963	OG	SER	B	331	33.205	8.676	-4.372	1.00	44.06	O
ATOM	1964	N	ARG	B	332	35.193	6.727	-1.123	1.00	34.39	N
ATOM	1965	CA	ARG	B	332	36.381	6.242	-0.407	1.00	39.40	C
ATOM	1966	C	ARG	B	332	37.630	6.760	-1.111	1.00	40.89	C
ATOM	1967	O	ARG	B	332	37.532	7.090	-2.301	1.00	37.21	O
ATOM	1968	CB	ARG	B	332	36.419	4.737	-0.540	1.00	41.47	C
ATOM	1969	CG	ARG	B	332	35.191	4.031	-0.039	1.00	35.40	C
ATOM	1970	CD	ARG	B	332	35.310	2.524	-0.298	1.00	36.04	C
ATOM	1971	NE	ARG	B	332	34.175	1.914	0.457	1.00	32.43	N
ATOM	1972	CZ	ARG	B	332	34.484	1.239	1.581	1.00	32.86	C
ATOM	1973	NH1	ARG	B	332	33.409	0.729	2.207	1.00	31.12	N
ATOM	1974	NH2	ARG	B	332	35.717	1.083	2.019	1.00	32.26	N
ATOM	1975	N	PRO	B	333	38.740	6.812	-0.404	1.00	40.15	N
ATOM	1976	CA	PRO	B	333	39.982	7.270	-0.991	1.00	42.44	C
ATOM	1977	C	PRO	B	333	40.526	6.211	-1.943	1.00	44.51	C
ATOM	1978	O	PRO	B	333	40.051	5.063	-1.909	1.00	35.65	O
ATOM	1979	CB	PRO	B	333	40.896	7.440	0.226	1.00	43.67	C
ATOM	1980	CG	PRO	B	333	40.351	6.524	1.268	1.00	43.95	C
ATOM	1981	CD	PRO	B	333	38.860	6.418	1.019	1.00	40.70	C
ATOM	1982	N	SER	B	334	41.467	6.565	-2.811	1.00	47.81	N
ATOM	1983	CA	SER	B	334	42.086	5.532	-3.662	1.00	53.70	C
ATOM	1984	C	SER	B	334	43.193	4.987	-2.730	1.00	54.54	C
ATOM	1985	O	SER	B	334	44.018	5.795	-2.305	1.00	57.51	O
ATOM	1986	CB	SER	B	334	42.770	6.035	-4.912	1.00	59.20	C
ATOM	1987	OG	SER	B	334	41.981	6.749	-5.830	1.00	62.84	O
ATOM	1988	N	ALA	B	335	43.218	3.740	-2.366	1.00	57.13	N
ATOM	1989	CA	ALA	B	335	44.189	3.118	-1.471	1.00	57.19	C
ATOM	1990	C	ALA	B	335	43.368	2.447	-0.371	1.00	56.88	C
ATOM	1991	O	ALA	B	335	42.285	2.954	-0.070	1.00	59.11	O
ATOM	1992	CB	ALA	B	335	45.256	4.037	-0.895	1.00	51.31	C
ATOM	1993	N	PRO	B	336	43.786	1.320	0.173	1.00	57.85	N
ATOM	1994	CA	PRO	B	336	43.002	0.675	1.230	1.00	50.78	C
ATOM	1995	C	PRO	B	336	42.779	1.635	2.383	1.00	44.37	C

ATOM	1996	O	PRO	B	336	43.612	2.549	2.492	1.00	37.84	O
ATOM	1997	CB	PRO	B	336	43.846	-0.531	1.585	1.00	53.06	C
ATOM	1998	CG	PRO	B	336	44.980	-0.609	0.642	1.00	56.37	C
ATOM	1999	CD	PRO	B	336	45.082	0.674	-0.133	1.00	56.75	C
ATOM	2000	N	PHE	B	337	41.748	1.638	3.226	1.00	40.95	N
ATOM	2001	CA	PHE	B	337	41.676	2.607	4.310	1.00	36.23	C
ATOM	2002	C	PHE	B	337	42.762	2.434	5.383	1.00	36.84	C
ATOM	2003	O	PHE	B	337	43.269	1.361	5.701	1.00	35.34	O
ATOM	2004	CB	PHE	B	337	40.390	2.499	5.159	1.00	31.96	C
ATOM	2005	CG	PHE	B	337	39.263	3.377	4.699	1.00	34.87	C
ATOM	2006	CD1	PHE	B	337	39.363	4.749	4.738	1.00	32.24	C
ATOM	2007	CD2	PHE	B	337	38.079	2.834	4.253	1.00	31.52	C
ATOM	2008	CE1	PHE	B	337	38.325	5.530	4.307	1.00	28.75	C
ATOM	2009	CE2	PHE	B	337	37.038	3.613	3.811	1.00	32.01	C
ATOM	2010	CZ	PHE	B	337	37.155	4.997	3.818	1.00	27.84	C
ATOM	2011	N	THR	B	338	43.131	3.544	6.012	1.00	33.30	N
ATOM	2012	CA	THR	B	338	44.013	3.534	7.156	1.00	29.45	C
ATOM	2013	C	THR	B	338	43.306	4.290	8.309	1.00	28.52	C
ATOM	2014	O	THR	B	338	42.339	4.992	8.067	1.00	26.68	O
ATOM	2015	CB	THR	B	338	45.368	4.221	6.987	1.00	32.68	C
ATOM	2016	OG1	THR	B	338	45.197	5.623	6.727	1.00	30.26	O
ATOM	2017	CG2	THR	B	338	46.145	3.553	5.846	1.00	29.51	C
ATOM	2018	N	GLU	B	339	43.924	4.256	9.484	1.00	28.92	N
ATOM	2019	CA	GLU	B	339	43.297	5.026	10.582	1.00	32.61	C
ATOM	2020	C	GLU	B	339	43.169	6.490	10.160	1.00	28.51	C
ATOM	2021	O	GLU	B	339	42.105	7.088	10.330	1.00	31.42	O
ATOM	2022	CB	GLU	B	339	44.151	4.892	11.848	1.00	28.29	C
ATOM	2023	CG	GLU	B	339	43.556	5.721	12.990	1.00	26.60	C
ATOM	2024	CD	GLU	B	339	44.224	5.307	14.295	1.00	33.99	C
ATOM	2025	OE1	GLU	B	339	45.146	6.015	14.724	1.00	36.37	O
ATOM	2026	OE2	GLU	B	339	43.792	4.279	14.845	1.00	34.15	O
ATOM	2027	N	ALA	B	340	44.255	7.107	9.675	1.00	29.47	N
ATOM	2028	CA	ALA	B	340	44.177	8.500	9.231	1.00	27.20	C
ATOM	2029	C	ALA	B	340	43.163	8.788	8.129	1.00	27.59	C
ATOM	2030	O	ALA	B	340	42.413	9.778	8.200	1.00	25.16	O
ATOM	2031	CB	ALA	B	340	45.549	8.937	8.663	1.00	28.39	C
ATOM	2032	N	SER	B	341	43.122	7.985	7.064	1.00	27.38	N
ATOM	2033	CA	SER	B	341	42.258	8.206	5.930	1.00	29.36	C
ATOM	2034	C	SER	B	341	40.800	7.917	6.248	1.00	29.72	C
ATOM	2035	O	SER	B	341	39.924	8.573	5.662	1.00	29.01	O
ATOM	2036	CB	SER	B	341	42.714	7.502	4.645	1.00	26.99	C
ATOM	2037	OG	SER	B	341	42.474	6.115	4.739	1.00	27.11	O
ATOM	2038	N	MET	B	342	40.529	6.985	7.166	1.00	24.98	N
ATOM	2039	CA	MET	B	342	39.150	6.743	7.561	1.00	23.68	C
ATOM	2040	C	MET	B	342	38.673	7.939	8.414	1.00	23.31	C
ATOM	2041	O	MET	B	342	37.523	8.386	8.206	1.00	25.29	O
ATOM	2042	CB	MET	B	342	38.896	5.487	8.386	1.00	27.55	C
ATOM	2043	CG	MET	B	342	37.397	5.215	8.550	1.00	27.66	C
ATOM	2044	SD	MET	B	342	37.090	3.656	9.380	1.00	29.65	S
ATOM	2045	CE	MET	B	342	35.507	3.104	8.974	1.00	44.03	C
ATOM	2046	N	MET	B	343	39.548	8.422	9.265	1.00	21.82	N
ATOM	2047	CA	MET	B	343	39.185	9.589	10.107	1.00	22.48	C
ATOM	2048	C	MET	B	343	39.016	10.811	9.212	1.00	24.67	C
ATOM	2049	O	MET	B	343	38.115	11.634	9.360	1.00	21.01	O
ATOM	2050	CB	MET	B	343	40.149	9.859	11.247	1.00	24.43	C
ATOM	2051	CG	MET	B	343	39.976	8.774	12.342	1.00	22.35	C
ATOM	2052	SD	MET	B	343	38.316	8.829	13.096	1.00	21.63	S
ATOM	2053	CE	MET	B	343	38.164	10.583	13.402	1.00	25.68	C
ATOM	2054	N	MET	B	344	39.885	10.922	8.218	1.00	24.93	N
ATOM	2055	CA	MET	B	344	39.791	12.034	7.260	1.00	25.48	C
ATOM	2056	C	MET	B	344	38.474	11.976	6.502	1.00	22.31	C
ATOM	2057	O	MET	B	344	37.846	13.025	6.324	1.00	23.67	O
ATOM	2058	CB	MET	B	344	40.955	11.930	6.239	1.00	29.94	C
ATOM	2059	CG	MET	B	344	40.791	13.025	5.182	1.00	37.21	C
ATOM	2060	SD	MET	B	344	42.354	13.368	4.341	1.00	40.57	S
ATOM	2061	CE	MET	B	344	42.937	14.787	5.241	1.00	35.41	C
ATOM	2062	N	SER	B	345	38.043	10.785	6.034	1.00	21.31	N
ATOM	2063	CA	SER	B	345	36.777	10.731	5.342	1.00	23.23	C
ATOM	2064	C	SER	B	345	35.615	11.153	6.253	1.00	22.08	C
ATOM	2065	O	SER	B	345	34.690	11.845	5.801	1.00	22.12	O
ATOM	2066	CB	SER	B	345	36.481	9.333	4.793	1.00	26.82	C
ATOM	2067	OG	SER	B	345	37.488	9.025	3.814	1.00	27.51	O
ATOM	2068	N	LEU	B	346	35.606	10.660	7.497	1.00	22.10	N
ATOM	2069	CA	LEU	B	346	34.441	11.013	8.332	1.00	21.15	C
ATOM	2070	C	LEU	B	346	34.404	12.485	8.686	1.00	18.81	C
ATOM	2071	O	LEU	B	346	33.298	13.099	8.724	1.00	22.67	O
ATOM	2072	CB	LEU	B	346	34.502	10.131	9.599	1.00	19.43	C

ATOM	2073	CG	LEU	B	346	34.427	8.639	9.369	1.00	24.42	C
ATOM	2074	CD1	LEU	B	346	34.561	7.966	10.740	1.00	28.57	C
ATOM	2075	CD2	LEU	B	346	33.157	8.187	8.655	1.00	29.99	C
ATOM	2076	N	THR	B	347	35.546	13.087	8.986	1.00	19.93	N
ATOM	2077	CA	THR	B	347	35.528	14.507	9.342	1.00	19.84	C
ATOM	2078	C	THR	B	347	35.308	15.411	8.124	1.00	24.67	C
ATOM	2079	O	THR	B	347	34.717	16.475	8.227	1.00	22.92	O
ATOM	2080	CB	THR	B	347	36.838	14.910	10.037	1.00	23.31	C
ATOM	2081	OG1	THR	B	347	37.991	14.605	9.228	1.00	24.67	O
ATOM	2082	CG2	THR	B	347	36.890	14.105	11.334	1.00	24.77	C
ATOM	2083	N	LYS	B	348	35.811	14.974	6.958	1.00	22.52	N
ATOM	2084	CA	LYS	B	348	35.551	15.788	5.765	1.00	23.61	C
ATOM	2085	C	LYS	B	348	34.059	15.717	5.428	1.00	24.49	C
ATOM	2086	O	LYS	B	348	33.456	16.725	5.062	1.00	22.74	O
ATOM	2087	CB	LYS	B	348	36.403	15.342	4.563	1.00	24.18	C
ATOM	2088	CG	LYS	B	348	36.053	16.197	3.334	1.00	37.16	C
ATOM	2089	CD	LYS	B	348	37.153	16.043	2.284	1.00	46.82	C
ATOM	2090	CE	LYS	B	348	36.641	16.262	0.860	1.00	55.26	C
ATOM	2091	NZ	LYS	B	348	37.815	16.235	-0.085	1.00	55.79	N
ATOM	2092	N	LEU	B	349	33.472	14.539	5.550	1.00	23.04	N
ATOM	2093	CA	LEU	B	349	32.029	14.391	5.307	1.00	23.65	C
ATOM	2094	C	LEU	B	349	31.203	15.243	6.270	1.00	20.57	C
ATOM	2095	O	LEU	B	349	30.243	15.901	5.846	1.00	19.40	O
ATOM	2096	CB	LEU	B	349	31.580	12.953	5.470	1.00	21.30	C
ATOM	2097	CG	LEU	B	349	30.096	12.610	5.442	1.00	19.13	C
ATOM	2098	CD1	LEU	B	349	29.501	13.108	4.100	1.00	24.56	C
ATOM	2099	CD2	LEU	B	349	29.844	11.135	5.672	1.00	19.63	C
ATOM	2100	N	ALA	B	350	31.613	15.152	7.561	1.00	16.98	N
ATOM	2101	CA	ALA	B	350	30.858	15.982	8.544	1.00	16.28	C
ATOM	2102	C	ALA	B	350	30.952	17.454	8.186	1.00	19.41	C
ATOM	2103	O	ALA	B	350	29.939	18.204	8.257	1.00	21.18	O
ATOM	2104	CB	ALA	B	350	31.472	15.773	9.941	1.00	22.64	C
ATOM	2105	N	ASP	B	351	32.101	17.948	7.738	1.00	23.16	N
ATOM	2106	CA	ASP	B	351	32.224	19.365	7.361	1.00	21.48	C
ATOM	2107	C	ASP	B	351	31.238	19.737	6.261	1.00	23.62	C
ATOM	2108	O	ASP	B	351	30.570	20.774	6.396	1.00	21.75	O
ATOM	2109	CB	ASP	B	351	33.665	19.593	6.857	1.00	25.15	C
ATOM	2110	CG	ASP	B	351	33.915	21.092	6.619	1.00	29.55	C
ATOM	2111	OD1	ASP	B	351	34.094	21.878	7.552	1.00	24.38	O
ATOM	2112	OD2	ASP	B	351	33.910	21.397	5.421	1.00	29.71	O
ATOM	2113	N	LYS	B	352	31.108	18.838	5.245	1.00	23.19	N
ATOM	2114	CA	LYS	B	352	30.201	19.124	4.157	1.00	20.51	C
ATOM	2115	C	LYS	B	352	28.758	19.109	4.667	1.00	24.27	C
ATOM	2116	O	LYS	B	352	27.947	19.974	4.327	1.00	21.67	O
ATOM	2117	CB	LYS	B	352	30.382	18.082	3.038	1.00	24.81	C
ATOM	2118	CG	LYS	B	352	31.877	17.933	2.601	1.00	30.93	C
ATOM	2119	CD	LYS	B	352	31.877	17.094	1.313	1.00	34.26	C
ATOM	2120	CE	LYS	B	352	33.301	17.013	0.763	1.00	41.29	C
ATOM	2121	NZ	LYS	B	352	33.509	15.899	-0.201	1.00	45.08	N
ATOM	2122	N	GLU	B	353	28.428	18.140	5.526	1.00	17.32	N
ATOM	2123	CA	GLU	B	353	27.046	18.100	6.066	1.00	16.22	C
ATOM	2124	C	GLU	B	353	26.782	19.277	7.021	1.00	16.23	C
ATOM	2125	O	GLU	B	353	25.612	19.734	7.097	1.00	19.91	O
ATOM	2126	CB	GLU	B	353	26.853	16.785	6.831	1.00	19.85	C
ATOM	2127	CG	GLU	B	353	26.755	15.616	5.849	1.00	19.59	C
ATOM	2128	CD	GLU	B	353	26.332	14.342	6.575	1.00	24.45	C
ATOM	2129	OE1	GLU	B	353	25.117	14.127	6.692	1.00	23.64	O
ATOM	2130	OE2	GLU	B	353	27.224	13.602	7.037	1.00	22.60	O
ATOM	2131	N	LEU	B	354	27.762	19.710	7.764	1.00	16.03	N
ATOM	2132	CA	LEU	B	354	27.579	20.814	8.704	1.00	17.28	C
ATOM	2133	C	LEU	B	354	27.244	22.116	7.957	1.00	22.35	C
ATOM	2134	O	LEU	B	354	26.380	22.849	8.466	1.00	20.33	O
ATOM	2135	CB	LEU	B	354	28.857	21.001	9.560	1.00	20.38	C
ATOM	2136	CG	LEU	B	354	29.000	19.896	10.630	1.00	20.09	C
ATOM	2137	CD1	LEU	B	354	30.374	20.090	11.265	1.00	17.36	C
ATOM	2138	CD2	LEU	B	354	27.921	20.070	11.703	1.00	20.87	C
ATOM	2139	N	VAL	B	355	27.823	22.335	6.779	1.00	19.23	N
ATOM	2140	CA	VAL	B	355	27.379	23.565	6.039	1.00	21.68	C
ATOM	2141	C	VAL	B	355	25.888	23.480	5.746	1.00	24.26	C
ATOM	2142	O	VAL	B	355	25.072	24.395	5.890	1.00	24.15	O
ATOM	2143	CB	VAL	B	355	28.129	23.625	4.686	1.00	27.74	C
ATOM	2144	CG1	VAL	B	355	27.656	24.778	3.790	1.00	26.81	C
ATOM	2145	CG2	VAL	B	355	29.647	23.727	4.865	1.00	27.16	C
ATOM	2146	N	HIS	B	356	25.415	22.304	5.323	1.00	23.49	N
ATOM	2147	CA	HIS	B	356	23.998	22.087	5.018	1.00	23.21	C
ATOM	2148	C	HIS	B	356	23.154	22.102	6.271	1.00	22.92	C
ATOM	2149	O	HIS	B	356	21.981	22.450	6.206	1.00	21.28	O

ATOM	2150	CB	HIS	B	356	23.798	20.750	4.290	1.00	22.36	C
ATOM	2151	CG	HIS	B	356	24.325	20.826	2.886	1.00	34.11	C
ATOM	2152	ND1	HIS	B	356	23.899	21.870	2.082	1.00	37.17	N
ATOM	2153	CD2	HIS	B	356	25.144	20.064	2.136	1.00	35.97	C
ATOM	2154	CE1	HIS	B	356	24.458	21.758	0.892	1.00	41.58	C
ATOM	2155	NE2	HIS	B	356	25.197	20.667	0.903	1.00	38.16	N
ATOM	2156	N	MET	B	357	23.731	21.675	7.431	1.00	20.58	N
ATOM	2157	CA	MET	B	357	22.903	21.723	8.643	1.00	22.73	C
ATOM	2158	C	MET	B	357	22.497	23.152	8.985	1.00	24.13	C
ATOM	2159	O	MET	B	357	21.409	23.360	9.509	1.00	21.21	O
ATOM	2160	CB	MET	B	357	23.662	21.090	9.825	1.00	20.64	C
ATOM	2161	CG	MET	B	357	22.815	20.946	11.072	1.00	22.76	C
ATOM	2162	SD	MET	B	357	23.835	20.185	12.386	1.00	19.26	S
ATOM	2163	CE	MET	B	357	24.212	18.588	11.655	1.00	23.13	C
ATOM	2164	N	ILE	B	358	23.412	24.115	8.842	1.00	22.55	N
ATOM	2165	CA	ILE	B	358	23.064	25.523	9.127	1.00	22.86	C
ATOM	2166	C	ILE	B	358	21.879	25.934	8.260	1.00	20.28	C
ATOM	2167	O	ILE	B	358	20.931	26.538	8.795	1.00	23.07	O
ATOM	2168	CB	ILE	B	358	24.241	26.456	8.781	1.00	25.27	C
ATOM	2169	CG1	ILE	B	358	25.478	26.169	9.603	1.00	23.65	C
ATOM	2170	CG2	ILE	B	358	23.830	27.946	9.041	1.00	24.03	C
ATOM	2171	CD1	ILE	B	358	25.384	26.213	11.077	1.00	23.64	C
ATOM	2172	N	SER	B	359	21.972	25.693	6.950	1.00	22.49	N
ATOM	2173	CA	SER	B	359	20.842	26.052	6.068	1.00	24.30	C
ATOM	2174	C	SER	B	359	19.550	25.362	6.492	1.00	23.34	C
ATOM	2175	O	SER	B	359	18.511	26.007	6.473	1.00	23.51	O
ATOM	2176	CB	SER	B	359	21.031	25.794	4.560	1.00	30.58	C
ATOM	2177	OG	SER	B	359	22.272	26.354	4.169	1.00	37.98	O
ATOM	2178	N	TRP	B	360	19.559	24.067	6.810	1.00	19.52	N
ATOM	2179	CA	TRP	B	360	18.403	23.362	7.307	1.00	19.34	C
ATOM	2180	C	TRP	B	360	17.853	24.045	8.542	1.00	21.70	C
ATOM	2181	O	TRP	B	360	16.636	24.272	8.688	1.00	23.01	O
ATOM	2182	CB	TRP	B	360	18.754	21.889	7.625	1.00	21.40	C
ATOM	2183	CG	TRP	B	360	17.855	21.145	8.551	1.00	21.72	C
ATOM	2184	CD1	TRP	B	360	16.645	20.604	8.179	1.00	23.33	C
ATOM	2185	CD2	TRP	B	360	18.032	20.823	9.939	1.00	19.39	C
ATOM	2186	NE1	TRP	B	360	16.043	19.988	9.280	1.00	21.79	N
ATOM	2187	CE2	TRP	B	360	16.885	20.113	10.352	1.00	21.03	C
ATOM	2188	CE3	TRP	B	360	19.033	21.075	10.873	1.00	19.08	C
ATOM	2189	CZ2	TRP	B	360	16.711	19.580	11.641	1.00	18.45	C
ATOM	2190	CZ3	TRP	B	360	18.880	20.573	12.184	1.00	19.70	C
ATOM	2191	CH2	TRP	B	360	17.725	19.859	12.534	1.00	18.29	C
ATOM	2192	N	ALA	B	361	18.711	24.302	9.535	1.00	19.80	N
ATOM	2193	CA	ALA	B	361	18.209	24.862	10.782	1.00	19.54	C
ATOM	2194	C	ALA	B	361	17.544	26.215	10.542	1.00	24.20	C
ATOM	2195	O	ALA	B	361	16.518	26.490	11.134	1.00	22.57	O
ATOM	2196	CB	ALA	B	361	19.298	24.976	11.820	1.00	19.50	C
ATOM	2197	N	LYS	B	362	18.144	27.014	9.638	1.00	21.91	N
ATOM	2198	CA	LYS	B	362	17.525	28.297	9.321	1.00	26.89	C
ATOM	2199	C	LYS	B	362	16.166	28.178	8.665	1.00	26.81	C
ATOM	2200	O	LYS	B	362	15.389	29.173	8.663	1.00	28.44	O
ATOM	2201	CB	LYS	B	362	18.501	29.050	8.378	1.00	26.95	C
ATOM	2202	CG	LYS	B	362	19.611	29.591	9.321	1.00	31.89	C
ATOM	2203	CD	LYS	B	362	20.665	30.388	8.556	1.00	36.74	C
ATOM	2204	CE	LYS	B	362	20.241	31.816	8.263	1.00	38.32	C
ATOM	2205	NZ	LYS	B	362	21.058	32.445	7.174	1.00	40.64	N
ATOM	2206	N	LYS	B	363	15.821	27.028	8.119	1.00	21.94	N
ATOM	2207	CA	LYS	B	363	14.518	26.860	7.486	1.00	25.35	C
ATOM	2208	C	LYS	B	363	13.451	26.373	8.469	1.00	29.06	C
ATOM	2209	O	LYS	B	363	12.281	26.308	8.042	1.00	29.31	O
ATOM	2210	CB	LYS	B	363	14.619	25.913	6.297	1.00	22.51	C
ATOM	2211	CG	LYS	B	363	15.615	26.489	5.273	1.00	25.76	C
ATOM	2212	CD	LYS	B	363	15.698	25.515	4.094	1.00	32.07	C
ATOM	2213	CE	LYS	B	363	16.603	26.053	3.000	1.00	34.68	C
ATOM	2214	NZ	LYS	B	363	16.953	24.999	2.007	1.00	44.70	N
ATOM	2215	N	ILE	B	364	13.808	26.069	9.684	1.00	27.38	N
ATOM	2216	CA	ILE	B	364	12.773	25.623	10.671	1.00	29.33	C
ATOM	2217	C	ILE	B	364	12.047	26.864	11.142	1.00	30.86	C
ATOM	2218	O	ILE	B	364	12.650	27.796	11.673	1.00	29.37	O
ATOM	2219	CB	ILE	B	364	13.395	24.857	11.834	1.00	27.92	C
ATOM	2220	CG1	ILE	B	364	13.941	23.545	11.255	1.00	35.56	C
ATOM	2221	CG2	ILE	B	364	12.345	24.497	12.901	1.00	31.49	C
ATOM	2222	CD1	ILE	B	364	14.792	22.804	12.242	1.00	32.74	C
ATOM	2223	N	PRO	B	365	10.733	26.896	10.963	1.00	34.82	N
ATOM	2224	CA	PRO	B	365	9.941	28.056	11.322	1.00	36.62	C
ATOM	2225	C	PRO	B	365	10.292	28.581	12.695	1.00	31.74	C
ATOM	2226	O	PRO	B	365	10.314	27.858	13.686	1.00	32.94	O

ATOM	2227	CB	PRO	B	365	8.495	27.578	11.208	1.00	34.89	C
ATOM	2228	CG	PRO	B	365	8.540	26.408	10.293	1.00	37.43	C
ATOM	2229	CD	PRO	B	365	9.903	25.808	10.380	1.00	36.52	C
ATOM	2230	N	GLY	B	366	10.626	29.867	12.731	1.00	35.19	N
ATOM	2231	CA	GLY	B	366	10.960	30.546	13.971	1.00	35.04	C
ATOM	2232	C	GLY	B	366	12.397	30.406	14.442	1.00	36.83	C
ATOM	2233	O	GLY	B	366	12.818	31.122	15.344	1.00	32.74	O
ATOM	2234	N	PHE	B	367	13.209	29.505	13.848	1.00	31.04	N
ATOM	2235	CA	PHE	B	367	14.576	29.367	14.330	1.00	28.81	C
ATOM	2236	C	PHE	B	367	15.347	30.679	14.151	1.00	27.63	C
ATOM	2237	O	PHE	B	367	16.041	31.071	15.087	1.00	29.57	O
ATOM	2238	CB	PHE	B	367	15.320	28.235	13.611	1.00	29.68	C
ATOM	2239	CG	PHE	B	367	16.726	28.000	14.123	1.00	27.93	C
ATOM	2240	CD1	PHE	B	367	16.930	27.180	15.194	1.00	28.07	C
ATOM	2241	CD2	PHE	B	367	17.821	28.601	13.513	1.00	26.67	C
ATOM	2242	CE1	PHE	B	367	18.209	26.951	15.704	1.00	29.07	C
ATOM	2243	CE2	PHE	B	367	19.097	28.356	13.981	1.00	24.62	C
ATOM	2244	CZ	PHE	B	367	19.315	27.524	15.089	1.00	24.18	C
ATOM	2245	N	VAL	B	368	15.198	31.350	13.010	1.00	31.59	N
ATOM	2246	CA	VAL	B	368	15.932	32.593	12.778	1.00	33.70	C
ATOM	2247	C	VAL	B	368	15.405	33.752	13.626	1.00	36.58	C
ATOM	2248	O	VAL	B	368	16.049	34.803	13.614	1.00	37.80	O
ATOM	2249	CB	VAL	B	368	15.910	33.003	11.301	1.00	32.36	C
ATOM	2250	CG1	VAL	B	368	16.690	32.000	10.443	1.00	34.27	C
ATOM	2251	CG2	VAL	B	368	14.475	33.098	10.777	1.00	38.21	C
ATOM	2252	N	GLU	B	369	14.302	33.609	14.325	1.00	38.63	N
ATOM	2253	CA	GLU	B	369	13.715	34.607	15.203	1.00	43.96	C
ATOM	2254	C	GLU	B	369	14.224	34.433	16.625	1.00	45.39	C
ATOM	2255	O	GLU	B	369	13.893	35.211	17.524	1.00	43.91	O
ATOM	2256	CB	GLU	B	369	12.190	34.521	15.182	1.00	50.15	C
ATOM	2257	CG	GLU	B	369	11.644	34.939	13.823	1.00	56.65	C
ATOM	2258	CD	GLU	B	369	10.217	34.475	13.615	1.00	60.83	C
ATOM	2259	OE1	GLU	B	369	9.519	34.182	14.605	1.00	62.32	O
ATOM	2260	OE2	GLU	B	369	9.811	34.400	12.434	1.00	63.35	O
ATOM	2261	N	LEU	B	370	14.973	33.349	16.842	1.00	38.98	N
ATOM	2262	CA	LEU	B	370	15.622	33.121	18.115	1.00	35.51	C
ATOM	2263	C	LEU	B	370	16.828	34.093	18.159	1.00	34.78	C
ATOM	2264	O	LEU	B	370	17.353	34.493	17.120	1.00	36.72	O
ATOM	2265	CB	LEU	B	370	16.152	31.688	18.280	1.00	33.38	C
ATOM	2266	CG	LEU	B	370	15.046	30.619	18.367	1.00	33.47	C
ATOM	2267	CD1	LEU	B	370	15.690	29.241	18.490	1.00	33.96	C
ATOM	2268	CD2	LEU	B	370	14.042	30.909	19.489	1.00	31.83	C
ATOM	2269	N	SER	B	371	17.257	34.414	19.362	1.00	36.47	N
ATOM	2270	CA	SER	B	371	18.406	35.290	19.526	1.00	36.59	C
ATOM	2271	C	SER	B	371	19.642	34.602	18.968	1.00	38.96	C
ATOM	2272	O	SER	B	371	19.671	33.352	18.929	1.00	33.42	O
ATOM	2273	CB	SER	B	371	18.660	35.563	21.010	1.00	36.21	C
ATOM	2274	OG	SER	B	371	19.276	34.476	21.679	1.00	34.10	O
ATOM	2275	N	LEU	B	372	20.661	35.404	18.625	1.00	32.71	N
ATOM	2276	CA	LEU	B	372	21.898	34.838	18.130	1.00	29.93	C
ATOM	2277	C	LEU	B	372	22.467	33.829	19.087	1.00	29.34	C
ATOM	2278	O	LEU	B	372	23.071	32.823	18.709	1.00	32.54	O
ATOM	2279	CB	LEU	B	372	22.919	35.966	17.938	1.00	34.52	C
ATOM	2280	CG	LEU	B	372	24.270	35.675	17.321	1.00	37.48	C
ATOM	2281	CD1	LEU	B	372	24.186	34.767	16.098	1.00	37.75	C
ATOM	2282	CD2	LEU	B	372	24.881	37.017	16.879	1.00	43.32	C
ATOM	2283	N	PHE	B	373	22.498	34.206	20.393	1.00	28.95	N
ATOM	2284	CA	PHE	B	373	23.087	33.272	21.358	1.00	33.97	C
ATOM	2285	C	PHE	B	373	22.304	31.967	21.429	1.00	29.91	C
ATOM	2286	O	PHE	B	373	22.960	30.926	21.545	1.00	29.72	O
ATOM	2287	CB	PHE	B	373	23.265	33.954	22.720	1.00	37.52	C
ATOM	2288	CG	PHE	B	373	24.325	35.046	22.637	1.00	41.67	C
ATOM	2289	CD1	PHE	B	373	25.146	35.196	21.539	1.00	46.80	C
ATOM	2290	CD2	PHE	B	373	24.528	35.901	23.707	1.00	46.96	C
ATOM	2291	CE1	PHE	B	373	26.109	36.176	21.462	1.00	49.01	C
ATOM	2292	CE2	PHE	B	373	25.492	36.899	23.645	1.00	46.70	C
ATOM	2293	CZ	PHE	B	373	26.278	37.025	22.527	1.00	46.90	C
ATOM	2294	N	ASP	B	374	20.973	32.048	21.348	1.00	31.02	N
ATOM	2295	CA	ASP	B	374	20.191	30.812	21.427	1.00	31.49	C
ATOM	2296	C	ASP	B	374	20.446	29.964	20.153	1.00	33.16	C
ATOM	2297	O	ASP	B	374	20.678	28.765	20.260	1.00	28.96	O
ATOM	2298	CB	ASP	B	374	18.706	31.023	21.603	1.00	31.44	C
ATOM	2299	CG	ASP	B	374	18.273	31.344	23.033	1.00	36.83	C
ATOM	2300	OD1	ASP	B	374	19.090	31.228	23.962	1.00	43.81	O
ATOM	2301	OD2	ASP	B	374	17.094	31.748	23.160	1.00	39.45	O
ATOM	2302	N	GLN	B	375	20.495	30.611	19.008	1.00	29.43	N
ATOM	2303	CA	GLN	B	375	20.774	29.839	17.775	1.00	28.70	C

ATOM	2304	C	GLN	B	375	22.083	29.093	17.902	1.00	28.91	C
ATOM	2305	O	GLN	B	375	22.174	27.926	17.537	1.00	24.32	O
ATOM	2306	CB	GLN	B	375	20.788	30.768	16.555	1.00	25.04	C
ATOM	2307	CG	GLN	B	375	19.398	31.276	16.157	1.00	26.15	C
ATOM	2308	CD	GLN	B	375	19.409	32.132	14.909	1.00	31.28	C
ATOM	2309	OE1	GLN	B	375	20.055	31.841	13.902	1.00	33.19	O
ATOM	2310	NE2	GLN	B	375	18.679	33.254	14.933	1.00	34.93	N
ATOM	2311	N	VAL	B	376	23.156	29.788	18.273	1.00	26.24	N
ATOM	2312	CA	VAL	B	376	24.475	29.229	18.402	1.00	24.06	C
ATOM	2313	C	VAL	B	376	24.563	28.156	19.479	1.00	24.86	C
ATOM	2314	O	VAL	B	376	25.224	27.136	19.230	1.00	27.38	O
ATOM	2315	CB	VAL	B	376	25.541	30.309	18.686	1.00	28.98	C
ATOM	2316	CG1	VAL	B	376	26.921	29.701	18.752	1.00	32.68	C
ATOM	2317	CG2	VAL	B	376	25.523	31.331	17.536	1.00	30.22	C
ATOM	2318	N	ARG	B	377	23.908	28.345	20.632	1.00	24.35	N
ATOM	2319	CA	ARG	B	377	24.042	27.277	21.626	1.00	25.87	C
ATOM	2320	C	ARG	B	377	23.297	26.014	21.143	1.00	21.79	C
ATOM	2321	O	ARG	B	377	23.788	24.893	21.450	1.00	25.08	O
ATOM	2322	CB	ARG	B	377	23.560	27.650	23.028	1.00	33.86	C
ATOM	2323	CG	ARG	B	377	22.067	27.918	23.037	1.00	34.88	C
ATOM	2324	CD	ARG	B	377	21.449	27.510	24.366	1.00	47.44	C
ATOM	2325	NE	ARG	B	377	20.176	28.177	24.596	1.00	49.34	N
ATOM	2326	CZ	ARG	B	377	19.171	27.713	25.323	1.00	51.60	C
ATOM	2327	NH1	ARG	B	377	18.060	28.424	25.451	1.00	52.27	N
ATOM	2328	NH2	ARG	B	377	19.257	26.509	25.900	1.00	53.69	N
ATOM	2329	N	LEU	B	378	22.163	26.167	20.499	1.00	21.68	N
ATOM	2330	CA	LEU	B	378	21.460	24.947	20.012	1.00	20.41	C
ATOM	2331	C	LEU	B	378	22.314	24.160	19.032	1.00	21.16	C
ATOM	2332	O	LEU	B	378	22.467	22.933	19.106	1.00	20.81	O
ATOM	2333	CB	LEU	B	378	20.113	25.303	19.394	1.00	24.70	C
ATOM	2334	CG	LEU	B	378	19.087	25.959	20.354	1.00	27.24	C
ATOM	2335	CD1	LEU	B	378	17.809	26.231	19.595	1.00	31.14	C
ATOM	2336	CD2	LEU	B	378	18.810	25.096	21.555	1.00	27.64	C
ATOM	2337	N	LEU	B	379	22.898	24.882	18.050	1.00	24.82	N
ATOM	2338	CA	LEU	B	379	23.728	24.202	17.033	1.00	20.15	C
ATOM	2339	C	LEU	B	379	24.979	23.625	17.606	1.00	20.62	C
ATOM	2340	O	LEU	B	379	25.339	22.469	17.307	1.00	20.65	O
ATOM	2341	CB	LEU	B	379	24.073	25.249	15.953	1.00	23.91	C
ATOM	2342	CG	LEU	B	379	22.907	25.518	14.998	1.00	27.86	C
ATOM	2343	CD1	LEU	B	379	23.168	26.790	14.196	1.00	26.74	C
ATOM	2344	CD2	LEU	B	379	22.716	24.332	14.054	1.00	30.30	C
ATOM	2345	N	GLU	B	380	25.609	24.340	18.583	1.00	20.83	N
ATOM	2346	CA	GLU	B	380	26.837	23.816	19.195	1.00	27.24	C
ATOM	2347	C	GLU	B	380	26.566	22.557	19.997	1.00	25.34	C
ATOM	2348	O	GLU	B	380	27.398	21.656	20.096	1.00	28.66	O
ATOM	2349	CB	GLU	B	380	27.454	24.857	20.156	1.00	35.51	C
ATOM	2350	CG	GLU	B	380	28.304	24.298	21.268	1.00	45.36	C
ATOM	2351	CD	GLU	B	380	27.717	23.925	22.601	1.00	52.55	C
ATOM	2352	OE1	GLU	B	380	26.687	24.467	23.075	1.00	55.73	O
ATOM	2353	OE2	GLU	B	380	28.296	23.028	23.260	1.00	58.84	O
ATOM	2354	N	SER	B	381	25.400	22.493	20.619	1.00	19.01	N
ATOM	2355	CA	SER	B	381	25.074	21.322	21.439	1.00	23.22	C
ATOM	2356	C	SER	B	381	24.624	20.084	20.669	1.00	24.76	C
ATOM	2357	O	SER	B	381	24.823	18.963	21.145	1.00	27.36	O
ATOM	2358	CB	SER	B	381	23.905	21.791	22.336	1.00	28.20	C
ATOM	2359	OG	SER	B	381	23.489	20.648	23.074	1.00	38.79	O
ATOM	2360	N	CYS	B	382	23.990	20.220	19.529	1.00	23.25	N
ATOM	2361	CA	CYS	B	382	23.404	19.066	18.844	1.00	22.65	C
ATOM	2362	C	CYS	B	382	24.073	18.600	17.567	1.00	20.33	C
ATOM	2363	O	CYS	B	382	23.538	17.569	17.123	1.00	17.89	O
ATOM	2364	CB	CYS	B	382	21.960	19.551	18.367	1.00	21.13	C
ATOM	2365	SG	CYS	B	382	21.899	20.543	16.890	1.00	23.58	S
ATOM	2366	N	TRP	B	383	25.182	19.230	17.120	1.00	20.02	N
ATOM	2367	CA	TRP	B	383	25.567	18.848	15.756	1.00	20.25	C
ATOM	2368	C	TRP	B	383	25.893	17.398	15.544	1.00	18.10	C
ATOM	2369	O	TRP	B	383	25.465	16.824	14.535	1.00	16.94	O
ATOM	2370	CB	TRP	B	383	26.621	19.831	15.176	1.00	15.50	C
ATOM	2371	CG	TRP	B	383	27.931	19.774	15.903	1.00	21.30	C
ATOM	2372	CD1	TRP	B	383	28.297	20.590	16.947	1.00	22.04	C
ATOM	2373	CD2	TRP	B	383	29.040	18.897	15.667	1.00	21.19	C
ATOM	2374	NE1	TRP	B	383	29.577	20.278	17.340	1.00	23.74	N
ATOM	2375	CE2	TRP	B	383	30.039	19.223	16.606	1.00	24.97	C
ATOM	2376	CE3	TRP	B	383	29.270	17.851	14.766	1.00	20.19	C
ATOM	2377	CZ2	TRP	B	383	31.274	18.571	16.630	1.00	20.39	C
ATOM	2378	CZ3	TRP	B	383	30.499	17.160	14.825	1.00	21.36	C
ATOM	2379	CH2	TRP	B	383	31.458	17.535	15.771	1.00	21.33	C
ATOM	2380	N	MET	B	384	26.697	16.818	16.461	1.00	14.48	N

ATOM	2381	CA	MET	B	384	27.004	15.391	16.204	1.00	14.60	C
ATOM	2382	C	MET	B	384	25.728	14.554	16.309	1.00	13.50	C
ATOM	2383	O	MET	B	384	25.586	13.590	15.552	1.00	14.76	O
ATOM	2384	CB	MET	B	384	28.076	14.944	17.205	1.00	18.83	C
ATOM	2385	CG	MET	B	384	28.416	13.468	16.921	1.00	18.80	C
ATOM	2386	SD	MET	B	384	29.317	13.154	15.378	1.00	21.33	S
ATOM	2387	CE	MET	B	384	30.967	13.601	15.920	1.00	23.47	C
ATOM	2388	N	GLU	B	385	24.841	14.861	17.239	1.00	15.97	N
ATOM	2389	CA	GLU	B	385	23.603	14.096	17.375	1.00	15.88	C
ATOM	2390	C	GLU	B	385	22.800	14.180	16.053	1.00	17.29	C
ATOM	2391	O	GLU	B	385	22.252	13.187	15.627	1.00	16.01	O
ATOM	2392	CB	GLU	B	385	22.771	14.484	18.620	1.00	17.76	C
ATOM	2393	CG	GLU	B	385	21.809	13.374	19.058	1.00	24.52	C
ATOM	2394	CD	GLU	B	385	20.950	13.711	20.264	1.00	26.25	C
ATOM	2395	OE1	GLU	B	385	21.287	14.670	21.028	1.00	22.77	O
ATOM	2396	OE2	GLU	B	385	19.912	13.009	20.370	1.00	29.33	O
ATOM	2397	N	VAL	B	386	22.686	15.386	15.517	1.00	14.08	N
ATOM	2398	CA	VAL	B	386	21.948	15.518	14.231	1.00	16.32	C
ATOM	2399	C	VAL	B	386	22.635	14.769	13.091	1.00	16.83	C
ATOM	2400	O	VAL	B	386	21.963	14.085	12.304	1.00	19.89	O
ATOM	2401	CB	VAL	B	386	21.759	16.989	13.868	1.00	17.16	C
ATOM	2402	CG1	VAL	B	386	21.078	17.126	12.493	1.00	18.55	C
ATOM	2403	CG2	VAL	B	386	20.831	17.639	14.899	1.00	19.24	C
ATOM	2404	N	LEU	B	387	23.950	14.819	13.024	1.00	15.69	N
ATOM	2405	CA	LEU	B	387	24.632	14.051	11.988	1.00	14.03	C
ATOM	2406	C	LEU	B	387	24.304	12.553	12.172	1.00	18.05	C
ATOM	2407	O	LEU	B	387	24.032	11.850	11.171	1.00	17.52	O
ATOM	2408	CB	LEU	B	387	26.147	14.161	12.110	1.00	14.39	C
ATOM	2409	CG	LEU	B	387	26.684	15.512	11.597	1.00	21.48	C
ATOM	2410	CD1	LEU	B	387	28.223	15.484	11.684	1.00	17.40	C
ATOM	2411	CD2	LEU	B	387	26.219	15.869	10.180	1.00	23.01	C
ATOM	2412	N	MET	B	388	24.426	12.102	13.447	1.00	17.21	N
ATOM	2413	CA	MET	B	388	24.204	10.641	13.637	1.00	15.95	C
ATOM	2414	C	MET	B	388	22.776	10.262	13.407	1.00	21.51	C
ATOM	2415	O	MET	B	388	22.538	9.135	12.961	1.00	16.11	O
ATOM	2416	CB	MET	B	388	24.684	10.247	15.053	1.00	14.53	C
ATOM	2417	CG	MET	B	388	26.216	10.335	15.089	1.00	17.68	C
ATOM	2418	SD	MET	B	388	26.703	9.858	16.808	1.00	16.78	S
ATOM	2419	CE	MET	B	388	28.434	9.539	16.435	1.00	17.17	C
ATOM	2420	N	MET	B	389	21.760	11.053	13.738	1.00	17.83	N
ATOM	2421	CA	MET	B	389	20.368	10.687	13.470	1.00	19.28	C
ATOM	2422	C	MET	B	389	20.181	10.547	11.948	1.00	20.51	C
ATOM	2423	O	MET	B	389	19.564	9.597	11.434	1.00	20.84	O
ATOM	2424	CB	MET	B	389	19.417	11.761	14.052	1.00	21.16	C
ATOM	2425	CG	MET	B	389	17.931	11.408	13.836	1.00	25.05	C
ATOM	2426	SD	MET	B	389	17.528	10.080	15.014	1.00	23.55	S
ATOM	2427	CE	MET	B	389	16.196	9.227	14.208	1.00	30.08	C
ATOM	2428	N	GLY	B	390	20.779	11.421	11.147	1.00	16.73	N
ATOM	2429	CA	GLY	B	390	20.738	11.345	9.678	1.00	18.39	C
ATOM	2430	C	GLY	B	390	21.392	10.039	9.195	1.00	23.35	C
ATOM	2431	O	GLY	B	390	20.834	9.346	8.340	1.00	21.82	O
ATOM	2432	N	LEU	B	391	22.525	9.700	9.795	1.00	21.91	N
ATOM	2433	CA	LEU	B	391	23.183	8.413	9.465	1.00	22.72	C
ATOM	2434	C	LEU	B	391	22.302	7.209	9.769	1.00	20.25	C
ATOM	2435	O	LEU	B	391	22.250	6.183	9.027	1.00	23.27	O
ATOM	2436	CB	LEU	B	391	24.496	8.326	10.207	1.00	21.80	C
ATOM	2437	CG	LEU	B	391	25.207	6.966	10.253	1.00	22.44	C
ATOM	2438	CD1	LEU	B	391	25.705	6.605	8.831	1.00	21.14	C
ATOM	2439	CD2	LEU	B	391	26.375	7.025	11.212	1.00	21.16	C
ATOM	2440	N	MET	B	392	21.655	7.214	10.935	1.00	20.70	N
ATOM	2441	CA	MET	B	392	20.773	6.122	11.304	1.00	20.15	C
ATOM	2442	C	MET	B	392	19.598	5.983	10.367	1.00	24.21	C
ATOM	2443	O	MET	B	392	19.317	4.873	9.923	1.00	22.83	O
ATOM	2444	CB	MET	B	392	20.246	6.277	12.746	1.00	23.62	C
ATOM	2445	CG	MET	B	392	21.386	6.151	13.732	1.00	24.52	C
ATOM	2446	SD	MET	B	392	20.748	6.520	15.414	1.00	28.58	S
ATOM	2447	CE	MET	B	392	22.377	6.498	16.202	1.00	28.75	C
ATOM	2448	N	TRP	B	393	18.950	7.099	9.981	1.00	22.28	N
ATOM	2449	CA	TRP	B	393	17.847	6.961	9.029	1.00	20.61	C
ATOM	2450	C	TRP	B	393	18.365	6.485	7.681	1.00	24.48	C
ATOM	2451	O	TRP	B	393	17.723	5.623	7.059	1.00	28.06	O
ATOM	2452	CB	TRP	B	393	17.227	8.374	8.916	1.00	23.80	C
ATOM	2453	CG	TRP	B	393	16.260	8.471	7.766	1.00	24.50	C
ATOM	2454	CD1	TRP	B	393	16.431	9.098	6.579	1.00	24.58	C
ATOM	2455	CD2	TRP	B	393	14.972	7.840	7.738	1.00	21.38	C
ATOM	2456	NE1	TRP	B	393	15.290	8.917	5.796	1.00	27.40	N
ATOM	2457	CE2	TRP	B	393	14.391	8.154	6.503	1.00	28.66	C

ATOM	2458	CE3	TRP	B	393	14.267	7.037	8.657	1.00	24.75	C
ATOM	2459	CZ2	TRP	B	393	13.124	7.673	6.163	1.00	28.29	C
ATOM	2460	CZ3	TRP	B	393	13.010	6.566	8.295	1.00	27.11	C
ATOM	2461	CH2	TRP	B	393	12.460	6.901	7.048	1.00	27.45	C
ATOM	2462	N	ARG	B	394	19.505	6.966	7.186	1.00	23.13	N
ATOM	2463	CA	ARG	B	394	20.018	6.491	5.889	1.00	24.56	C
ATOM	2464	C	ARG	B	394	20.358	5.007	5.979	1.00	26.56	C
ATOM	2465	O	ARG	B	394	20.390	4.287	4.973	1.00	29.56	O
ATOM	2466	CB	ARG	B	394	21.306	7.218	5.445	1.00	23.42	C
ATOM	2467	CG	ARG	B	394	21.074	8.645	4.950	1.00	23.53	C
ATOM	2468	CD	ARG	B	394	22.315	9.317	4.420	1.00	26.61	C
ATOM	2469	NE	ARG	B	394	23.421	9.413	5.344	1.00	23.76	N
ATOM	2470	CZ	ARG	B	394	23.630	10.344	6.297	1.00	25.92	C
ATOM	2471	NH1	ARG	B	394	22.726	11.331	6.457	1.00	22.67	N
ATOM	2472	NH2	ARG	B	394	24.719	10.304	7.022	1.00	22.50	N
ATOM	2473	N	SER	B	395	20.764	4.502	7.115	1.00	23.85	N
ATOM	2474	CA	SER	B	395	21.176	3.121	7.281	1.00	23.86	C
ATOM	2475	C	SER	B	395	20.068	2.181	7.720	1.00	24.73	C
ATOM	2476	O	SER	B	395	20.347	1.019	7.877	1.00	30.38	O
ATOM	2477	CB	SER	B	395	22.242	3.119	8.389	1.00	25.71	C
ATOM	2478	OG	SER	B	395	23.323	3.973	8.015	1.00	27.34	O
ATOM	2479	N	ILE	B	396	18.834	2.641	7.857	1.00	26.38	N
ATOM	2480	CA	ILE	B	396	17.781	1.858	8.483	1.00	28.13	C
ATOM	2481	C	ILE	B	396	17.402	0.603	7.714	1.00	34.05	C
ATOM	2482	O	ILE	B	396	17.107	-0.388	8.375	1.00	36.61	O
ATOM	2483	CB	ILE	B	396	16.621	2.803	8.794	1.00	31.52	C
ATOM	2484	CG1	ILE	B	396	15.694	2.324	9.911	1.00	35.64	C
ATOM	2485	CG2	ILE	B	396	15.806	3.086	7.517	1.00	35.73	C
ATOM	2486	CD1	ILE	B	396	14.689	3.407	10.306	1.00	34.63	C
ATOM	2487	N	ASP	B	397	17.500	0.642	6.395	1.00	30.79	N
ATOM	2488	CA	ASP	B	397	17.150	-0.561	5.623	1.00	35.31	C
ATOM	2489	C	ASP	B	397	18.390	-1.323	5.207	1.00	39.39	C
ATOM	2490	O	ASP	B	397	18.306	-2.164	4.290	1.00	41.34	O
ATOM	2491	CB	ASP	B	397	16.327	-0.097	4.413	1.00	36.48	C
ATOM	2492	CG	ASP	B	397	14.950	0.392	4.797	1.00	38.41	C
ATOM	2493	OD1	ASP	B	397	14.307	-0.118	5.739	1.00	42.42	O
ATOM	2494	OD2	ASP	B	397	14.411	1.326	4.186	1.00	43.72	O
ATOM	2495	N	HIS	B	398	19.565	-1.140	5.795	1.00	34.30	N
ATOM	2496	CA	HIS	B	398	20.800	-1.831	5.448	1.00	33.99	C
ATOM	2497	C	HIS	B	398	21.512	-2.367	6.666	1.00	32.82	C
ATOM	2498	O	HIS	B	398	22.577	-1.931	7.129	1.00	31.78	O
ATOM	2499	CB	HIS	B	398	21.773	-0.937	4.621	1.00	32.15	C
ATOM	2500	CG	HIS	B	398	21.111	-0.344	3.416	1.00	39.99	C
ATOM	2501	ND1	HIS	B	398	20.631	0.946	3.405	1.00	47.14	N
ATOM	2502	CD2	HIS	B	398	20.791	-0.849	2.203	1.00	40.00	C
ATOM	2503	CE1	HIS	B	398	20.049	1.222	2.255	1.00	45.76	C
ATOM	2504	NE2	HIS	B	398	20.127	0.138	1.505	1.00	45.33	N
ATOM	2505	N	PRO	B	399	20.997	-3.480	7.213	1.00	32.19	N
ATOM	2506	CA	PRO	B	399	21.603	-4.117	8.377	1.00	31.87	C
ATOM	2507	C	PRO	B	399	23.046	-4.448	8.135	1.00	29.07	C
ATOM	2508	O	PRO	B	399	23.508	-4.725	7.021	1.00	34.53	O
ATOM	2509	CB	PRO	B	399	20.694	-5.275	8.753	1.00	35.73	C
ATOM	2510	CG	PRO	B	399	19.681	-5.366	7.687	1.00	34.94	C
ATOM	2511	CD	PRO	B	399	19.797	-4.199	6.757	1.00	34.15	C
ATOM	2512	N	GLY	B	400	23.871	-4.247	9.145	1.00	24.75	N
ATOM	2513	CA	GLY	B	400	25.300	-4.470	9.167	1.00	31.04	C
ATOM	2514	C	GLY	B	400	26.084	-3.377	8.472	1.00	26.14	C
ATOM	2515	O	GLY	B	400	27.310	-3.481	8.447	1.00	33.44	O
ATOM	2516	N	LYS	B	401	25.464	-2.344	7.923	1.00	27.98	N
ATOM	2517	CA	LYS	B	401	26.215	-1.291	7.249	1.00	27.46	C
ATOM	2518	C	LYS	B	401	25.856	0.115	7.788	1.00	27.45	C
ATOM	2519	O	LYS	B	401	24.718	0.303	8.222	1.00	24.43	O
ATOM	2520	CB	LYS	B	401	25.821	-1.148	5.776	1.00	27.97	C
ATOM	2521	CG	LYS	B	401	26.773	-1.932	4.848	1.00	40.85	C
ATOM	2522	CD	LYS	B	401	26.112	-3.245	4.546	1.00	44.41	C
ATOM	2523	CE	LYS	B	401	26.659	-3.895	3.278	1.00	47.73	C
ATOM	2524	NZ	LYS	B	401	25.668	-4.872	2.737	1.00	52.90	N
ATOM	2525	N	LEU	B	402	26.821	1.008	7.581	1.00	26.26	N
ATOM	2526	CA	LEU	B	402	26.566	2.427	7.952	1.00	24.76	C
ATOM	2527	C	LEU	B	402	26.626	3.231	6.668	1.00	21.76	C
ATOM	2528	O	LEU	B	402	27.723	3.311	6.078	1.00	25.19	O
ATOM	2529	CB	LEU	B	402	27.563	2.905	9.012	1.00	25.71	C
ATOM	2530	CG	LEU	B	402	27.398	2.307	10.426	1.00	24.37	C
ATOM	2531	CD1	LEU	B	402	28.525	2.816	11.330	1.00	26.93	C
ATOM	2532	CD2	LEU	B	402	26.031	2.617	11.052	1.00	27.97	C
ATOM	2533	N	ILE	B	403	25.500	3.763	6.196	1.00	21.80	N
ATOM	2534	CA	ILE	B	403	25.509	4.564	4.969	1.00	22.69	C

ATOM	2535	C	ILE	B	403	25.895	6.009	5.309	1.00	23.32	C
ATOM	2536	O	ILE	B	403	25.026	6.891	5.417	1.00	23.36	O
ATOM	2537	CB	ILE	B	403	24.097	4.548	4.338	1.00	24.13	C
ATOM	2538	CG1	ILE	B	403	23.581	3.119	4.187	1.00	32.41	C
ATOM	2539	CG2	ILE	B	403	24.026	5.326	3.049	1.00	24.82	C
ATOM	2540	CD1	ILE	B	403	24.551	2.152	3.559	1.00	38.99	C
ATOM	2541	N	PHE	B	404	27.176	6.294	5.453	1.00	25.16	N
ATOM	2542	CA	PHE	B	404	27.584	7.683	5.787	1.00	22.64	C
ATOM	2543	C	PHE	B	404	27.182	8.616	4.666	1.00	24.43	C
ATOM	2544	O	PHE	B	404	26.742	9.749	4.825	1.00	24.33	O
ATOM	2545	CB	PHE	B	404	29.081	7.725	6.047	1.00	20.55	C
ATOM	2546	CG	PHE	B	404	29.441	7.288	7.436	1.00	21.35	C
ATOM	2547	CD1	PHE	B	404	29.764	5.968	7.693	1.00	22.55	C
ATOM	2548	CD2	PHE	B	404	29.344	8.164	8.521	1.00	18.14	C
ATOM	2549	CE1	PHE	B	404	30.054	5.542	8.971	1.00	22.47	C
ATOM	2550	CE2	PHE	B	404	29.650	7.710	9.792	1.00	20.41	C
ATOM	2551	CZ	PHE	B	404	29.989	6.406	10.037	1.00	23.05	C
ATOM	2552	N	ALA	B	405	27.352	8.116	3.432	1.00	21.86	N
ATOM	2553	CA	ALA	B	405	26.933	8.855	2.229	1.00	29.53	C
ATOM	2554	C	ALA	B	405	26.589	7.823	1.170	1.00	29.06	C
ATOM	2555	O	ALA	B	405	27.088	6.694	1.257	1.00	29.31	O
ATOM	2556	CB	ALA	B	405	28.056	9.769	1.776	1.00	30.10	C
ATOM	2557	N	PRO	B	406	25.908	8.200	0.102	1.00	32.86	N
ATOM	2558	CA	PRO	B	406	25.507	7.243	-0.932	1.00	34.92	C
ATOM	2559	C	PRO	B	406	26.686	6.453	-1.442	1.00	33.76	C
ATOM	2560	O	PRO	B	406	26.578	5.239	-1.718	1.00	30.44	O
ATOM	2561	CB	PRO	B	406	24.815	8.126	-1.979	1.00	37.23	C
ATOM	2562	CG	PRO	B	406	24.140	9.155	-1.108	1.00	38.70	C
ATOM	2563	CD	PRO	B	406	25.224	9.508	-0.090	1.00	32.36	C
ATOM	2564	N	ASP	B	407	27.861	7.059	-1.609	1.00	32.30	N
ATOM	2565	CA	ASP	B	407	29.049	6.341	-2.059	1.00	33.54	C
ATOM	2566	C	ASP	B	407	30.052	6.082	-0.947	1.00	31.74	C
ATOM	2567	O	ASP	B	407	31.198	5.716	-1.205	1.00	28.74	O
ATOM	2568	CB	ASP	B	407	29.683	7.099	-3.231	1.00	40.47	C
ATOM	2569	CG	ASP	B	407	30.508	6.255	-4.174	1.00	48.65	C
ATOM	2570	OD1	ASP	B	407	30.218	5.039	-4.303	1.00	51.06	O
ATOM	2571	OD2	ASP	B	407	31.459	6.821	-4.779	1.00	47.04	O
ATOM	2572	N	LEU	B	408	29.675	6.252	0.333	1.00	29.67	N
ATOM	2573	CA	LEU	B	408	30.615	5.993	1.448	1.00	24.21	C
ATOM	2574	C	LEU	B	408	29.831	5.074	2.398	1.00	27.05	C
ATOM	2575	O	LEU	B	408	29.170	5.478	3.366	1.00	28.32	O
ATOM	2576	CB	LEU	B	408	31.020	7.259	2.189	1.00	25.91	C
ATOM	2577	CG	LEU	B	408	32.085	7.094	3.287	1.00	24.69	C
ATOM	2578	CD1	LEU	B	408	33.332	6.409	2.725	1.00	31.78	C
ATOM	2579	CD2	LEU	B	408	32.461	8.417	3.938	1.00	28.24	C
ATOM	2580	N	VAL	B	409	29.791	3.801	2.020	1.00	27.88	N
ATOM	2581	CA	VAL	B	409	29.012	2.803	2.773	1.00	26.77	C
ATOM	2582	C	VAL	B	409	29.998	1.872	3.455	1.00	30.15	C
ATOM	2583	O	VAL	B	409	30.763	1.161	2.787	1.00	30.60	O
ATOM	2584	CB	VAL	B	409	28.159	1.992	1.775	1.00	31.29	C
ATOM	2585	CG1	VAL	B	409	27.482	0.811	2.453	1.00	29.21	C
ATOM	2586	CG2	VAL	B	409	27.139	2.874	1.070	1.00	27.53	C
ATOM	2587	N	LEU	B	410	30.037	1.887	4.763	1.00	27.22	N
ATOM	2588	CA	LEU	B	410	30.973	1.134	5.549	1.00	27.72	C
ATOM	2589	C	LEU	B	410	30.376	-0.077	6.252	1.00	32.86	C
ATOM	2590	O	LEU	B	410	29.347	-0.047	6.917	1.00	30.92	O
ATOM	2591	CB	LEU	B	410	31.704	1.959	6.625	1.00	27.54	C
ATOM	2592	CG	LEU	B	410	32.422	3.213	6.106	1.00	30.97	C
ATOM	2593	CD1	LEU	B	410	33.120	3.953	7.234	1.00	31.37	C
ATOM	2594	CD2	LEU	B	410	33.403	2.827	4.982	1.00	27.37	C
ATOM	2595	N	ASP	B	411	31.076	-1.196	6.010	1.00	30.35	N
ATOM	2596	CA	ASP	B	411	30.653	-2.412	6.717	1.00	33.84	C
ATOM	2597	C	ASP	B	411	31.102	-2.276	8.164	1.00	30.61	C
ATOM	2598	O	ASP	B	411	32.149	-1.691	8.457	1.00	30.55	O
ATOM	2599	CB	ASP	B	411	31.307	-3.645	6.059	1.00	39.46	C
ATOM	2600	CG	ASP	B	411	30.415	-4.056	4.899	1.00	47.55	C
ATOM	2601	OD1	ASP	B	411	30.302	-3.357	3.883	1.00	52.15	O
ATOM	2602	OD2	ASP	B	411	29.773	-5.106	5.083	1.00	58.50	O
ATOM	2603	N	ARG	B	412	30.311	-2.868	9.050	1.00	29.95	N
ATOM	2604	CA	ARG	B	412	30.622	-2.877	10.474	1.00	33.26	C
ATOM	2605	C	ARG	B	412	32.082	-3.177	10.738	1.00	35.75	C
ATOM	2606	O	ARG	B	412	32.791	-2.445	11.412	1.00	34.51	O
ATOM	2607	CB	ARG	B	412	29.688	-3.891	11.142	1.00	32.44	C
ATOM	2608	CG	ARG	B	412	29.783	-3.893	12.664	1.00	37.89	C
ATOM	2609	CD	ARG	B	412	30.653	-5.027	13.176	1.00	44.63	C
ATOM	2610	NE	ARG	B	412	30.821	-5.015	14.633	1.00	44.43	N
ATOM	2611	CZ	ARG	B	412	31.756	-5.775	15.205	1.00	47.95	C

ATOM	2612	NH1	ARG	B	412	31.941	-5.791	16.516	1.00	47.65	N
ATOM	2613	NH2	ARG	B	412	32.507	-6.553	14.425	1.00	48.50	N
ATOM	2614	N	ASP	B	413	32.629	-4.265	10.155	1.00	34.38	N
ATOM	2615	CA	ASP	B	413	33.995	-4.708	10.311	1.00	37.43	C
ATOM	2616	C	ASP	B	413	35.067	-3.763	9.852	1.00	35.77	C
ATOM	2617	O	ASP	B	413	36.216	-3.738	10.383	1.00	34.32	O
ATOM	2618	CB	ASP	B	413	34.161	-6.089	9.610	1.00	40.66	C
ATOM	2619	CG	ASP	B	413	33.536	-7.189	10.460	1.00	48.67	C
ATOM	2620	OD1	ASP	B	413	33.368	-7.006	11.691	1.00	47.59	O
ATOM	2621	OD2	ASP	B	413	33.192	-8.253	9.876	1.00	51.36	O
ATOM	2622	N	GLU	B	414	34.720	-2.781	8.992	1.00	35.67	N
ATOM	2623	CA	GLU	B	414	35.764	-1.812	8.612	1.00	34.95	C
ATOM	2624	C	GLU	B	414	36.070	-0.879	9.769	1.00	39.07	C
ATOM	2625	O	GLU	B	414	37.039	-0.107	9.723	1.00	35.84	O
ATOM	2626	CB	GLU	B	414	35.471	-1.117	7.306	1.00	35.06	C
ATOM	2627	CG	GLU	B	414	35.025	-1.983	6.129	1.00	35.23	C
ATOM	2628	CD	GLU	B	414	34.667	-1.067	4.959	1.00	38.62	C
ATOM	2629	OE1	GLU	B	414	33.472	-0.896	4.675	1.00	36.28	O
ATOM	2630	OE2	GLU	B	414	35.637	-0.530	4.369	1.00	42.35	O
ATOM	2631	N	GLY	B	415	35.355	-0.973	10.889	1.00	37.63	N
ATOM	2632	CA	GLY	B	415	35.596	-0.212	12.090	1.00	42.19	C
ATOM	2633	C	GLY	B	415	36.892	-0.655	12.772	1.00	39.93	C
ATOM	2634	O	GLY	B	415	37.534	0.065	13.534	1.00	36.09	O
ATOM	2635	N	LYS	B	416	37.442	-1.834	12.419	1.00	40.99	N
ATOM	2636	CA	LYS	B	416	38.725	-2.262	12.965	1.00	39.11	C
ATOM	2637	C	LYS	B	416	39.867	-1.387	12.507	1.00	39.37	C
ATOM	2638	O	LYS	B	416	40.933	-1.353	13.131	1.00	37.86	O
ATOM	2639	CB	LYS	B	416	38.996	-3.731	12.591	1.00	45.05	C
ATOM	2640	CG	LYS	B	416	38.051	-4.656	13.358	1.00	46.63	C
ATOM	2641	CD	LYS	B	416	38.112	-6.062	12.770	1.00	50.30	C
ATOM	2642	CE	LYS	B	416	37.255	-7.010	13.607	1.00	55.85	C
ATOM	2643	NZ	LYS	B	416	37.618	-6.901	15.056	1.00	57.31	N
ATOM	2644	N	CYS	B	417	39.673	-0.609	11.441	1.00	42.91	N
ATOM	2645	CA	CYS	B	417	40.649	0.299	10.915	1.00	38.32	C
ATOM	2646	C	CYS	B	417	41.041	1.434	11.844	1.00	38.44	C
ATOM	2647	O	CYS	B	417	42.143	1.931	11.609	1.00	36.80	O
ATOM	2648	CB	CYS	B	417	40.175	0.938	9.589	1.00	44.73	C
ATOM	2649	SG	CYS	B	417	39.633	-0.209	8.291	1.00	49.95	S
ATOM	2650	N	VAL	B	418	40.239	1.960	12.775	1.00	28.66	N
ATOM	2651	CA	VAL	B	418	40.670	3.094	13.606	1.00	25.58	C
ATOM	2652	C	VAL	B	418	40.658	2.691	15.095	1.00	23.05	C
ATOM	2653	O	VAL	B	418	39.612	2.113	15.416	1.00	27.29	O
ATOM	2654	CB	VAL	B	418	39.598	4.212	13.406	1.00	28.69	C
ATOM	2655	CG1	VAL	B	418	39.790	5.412	14.295	1.00	29.09	C
ATOM	2656	CG2	VAL	B	418	39.626	4.666	11.935	1.00	24.25	C
ATOM	2657	N	GLU	B	419	41.631	3.069	15.872	1.00	28.15	N
ATOM	2658	CA	GLU	B	419	41.604	2.736	17.304	1.00	31.89	C
ATOM	2659	C	GLU	B	419	40.285	3.190	17.969	1.00	33.35	C
ATOM	2660	O	GLU	B	419	39.950	4.368	17.887	1.00	28.30	O
ATOM	2661	CB	GLU	B	419	42.779	3.421	17.983	1.00	37.11	C
ATOM	2662	CG	GLU	B	419	43.069	2.956	19.406	1.00	40.40	C
ATOM	2663	CD	GLU	B	419	44.152	3.719	20.136	1.00	49.85	C
ATOM	2664	OE1	GLU	B	419	44.530	4.850	19.758	1.00	53.97	O
ATOM	2665	OE2	GLU	B	419	44.661	3.211	21.160	1.00	52.13	O
ATOM	2666	N	GLY	B	420	39.552	2.281	18.583	1.00	29.93	N
ATOM	2667	CA	GLY	B	420	38.334	2.499	19.315	1.00	35.47	C
ATOM	2668	C	GLY	B	420	37.061	2.865	18.598	1.00	33.37	C
ATOM	2669	O	GLY	B	420	35.982	3.059	19.214	1.00	28.93	O
ATOM	2670	N	ILE	B	421	37.097	2.945	17.248	1.00	27.21	N
ATOM	2671	CA	ILE	B	421	35.871	3.377	16.566	1.00	27.21	C
ATOM	2672	C	ILE	B	421	34.832	2.295	16.473	1.00	28.34	C
ATOM	2673	O	ILE	B	421	33.631	2.452	16.301	1.00	26.36	O
ATOM	2674	CB	ILE	B	421	36.197	3.956	15.177	1.00	26.54	C
ATOM	2675	CG1	ILE	B	421	35.169	5.104	14.907	1.00	22.99	C
ATOM	2676	CG2	ILE	B	421	36.146	2.861	14.124	1.00	28.24	C
ATOM	2677	CD1	ILE	B	421	35.566	5.887	13.638	1.00	20.02	C
ATOM	2678	N	LEU	B	422	35.319	1.030	16.567	1.00	30.64	N
ATOM	2679	CA	LEU	B	422	34.437	-0.125	16.473	1.00	26.65	C
ATOM	2680	C	LEU	B	422	33.300	-0.064	17.501	1.00	28.98	C
ATOM	2681	O	LEU	B	422	32.160	-0.392	17.176	1.00	32.01	O
ATOM	2682	CB	LEU	B	422	35.253	-1.426	16.541	1.00	33.58	C
ATOM	2683	CG	LEU	B	422	34.523	-2.640	15.946	1.00	38.34	C
ATOM	2684	CD1	LEU	B	422	34.221	-2.456	14.475	1.00	36.28	C
ATOM	2685	CD2	LEU	B	422	35.363	-3.917	16.121	1.00	38.73	C
ATOM	2686	N	GLU	B	423	33.538	0.370	18.702	1.00	28.85	N
ATOM	2687	CA	GLU	B	423	32.522	0.549	19.732	1.00	32.02	C
ATOM	2688	C	GLU	B	423	31.482	1.582	19.233	1.00	28.01	C

ATOM	2689	O	GLU	B	423	30.311	1.306	19.357	1.00	29.37	O
ATOM	2690	CB	GLU	B	423	33.167	1.072	21.005	1.00	37.08	C
ATOM	2691	CG	GLU	B	423	32.212	1.673	22.018	1.00	50.36	C
ATOM	2692	CD	GLU	B	423	32.890	1.780	23.375	1.00	59.51	C
ATOM	2693	OE1	GLU	B	423	33.922	2.477	23.432	1.00	60.42	O
ATOM	2694	OE2	GLU	B	423	32.376	1.149	24.324	1.00	63.97	O
ATOM	2695	N	ILE	B	424	31.944	2.676	18.640	1.00	27.62	N
ATOM	2696	CA	ILE	B	424	30.998	3.704	18.153	1.00	26.62	C
ATOM	2697	C	ILE	B	424	30.143	3.121	17.042	1.00	25.97	C
ATOM	2698	O	ILE	B	424	28.900	3.176	17.017	1.00	23.96	O
ATOM	2699	CB	ILE	B	424	31.725	4.968	17.692	1.00	26.20	C
ATOM	2700	CG1	ILE	B	424	32.722	5.559	18.712	1.00	31.88	C
ATOM	2701	CG2	ILE	B	424	30.778	6.086	17.268	1.00	27.72	C
ATOM	2702	CD1	ILE	B	424	32.350	5.412	20.158	1.00	34.17	C
ATOM	2703	N	PHE	B	425	30.766	2.416	16.063	1.00	25.62	N
ATOM	2704	CA	PHE	B	425	29.957	1.847	14.997	1.00	21.95	C
ATOM	2705	C	PHE	B	425	28.914	0.868	15.521	1.00	26.08	C
ATOM	2706	O	PHE	B	425	27.790	0.763	15.034	1.00	24.27	O
ATOM	2707	CB	PHE	B	425	30.826	1.075	13.983	1.00	26.92	C
ATOM	2708	CG	PHE	B	425	31.634	1.932	13.044	1.00	27.06	C
ATOM	2709	CD1	PHE	B	425	31.806	3.294	13.258	1.00	25.62	C
ATOM	2710	CD2	PHE	B	425	32.263	1.340	11.972	1.00	28.77	C
ATOM	2711	CE1	PHE	B	425	32.558	4.078	12.405	1.00	27.33	C
ATOM	2712	CE2	PHE	B	425	33.036	2.130	11.108	1.00	32.05	C
ATOM	2713	CZ	PHE	B	425	33.183	3.479	11.331	1.00	29.20	C
ATOM	2714	N	ASP	B	426	29.320	0.056	16.542	1.00	25.65	N
ATOM	2715	CA	ASP	B	426	28.333	-0.901	17.050	1.00	27.00	C
ATOM	2716	C	ASP	B	426	27.169	-0.187	17.746	1.00	27.33	C
ATOM	2717	O	ASP	B	426	26.058	-0.669	17.623	1.00	26.00	O
ATOM	2718	CB	ASP	B	426	29.012	-1.873	18.040	1.00	28.08	C
ATOM	2719	CG	ASP	B	426	29.802	-2.966	17.334	1.00	32.25	C
ATOM	2720	OD1	ASP	B	426	29.491	-3.324	16.188	1.00	38.16	O
ATOM	2721	OD2	ASP	B	426	30.761	-3.474	17.971	1.00	35.77	O
ATOM	2722	N	MET	B	427	27.404	0.925	18.430	1.00	28.31	N
ATOM	2723	CA	MET	B	427	26.269	1.631	19.062	1.00	28.00	C
ATOM	2724	C	MET	B	427	25.357	2.226	17.979	1.00	25.62	C
ATOM	2725	O	MET	B	427	24.142	2.282	18.161	1.00	25.62	O
ATOM	2726	CB	MET	B	427	26.681	2.796	19.918	1.00	29.81	C
ATOM	2727	CG	MET	B	427	27.634	2.578	21.042	1.00	37.26	C
ATOM	2728	SD	MET	B	427	28.151	4.195	21.708	1.00	34.12	S
ATOM	2729	CE	MET	B	427	29.288	3.514	22.936	1.00	43.31	C
ATOM	2730	N	LEU	B	428	26.004	2.737	16.913	1.00	22.88	N
ATOM	2731	CA	LEU	B	428	25.254	3.340	15.816	1.00	23.53	C
ATOM	2732	C	LEU	B	428	24.379	2.312	15.135	1.00	23.97	C
ATOM	2733	O	LEU	B	428	23.174	2.458	14.914	1.00	23.39	O
ATOM	2734	CB	LEU	B	428	26.225	4.054	14.844	1.00	19.14	C
ATOM	2735	CG	LEU	B	428	26.870	5.340	15.366	1.00	20.66	C
ATOM	2736	CD1	LEU	B	428	28.092	5.656	14.471	1.00	23.34	C
ATOM	2737	CD2	LEU	B	428	25.857	6.485	15.509	1.00	19.84	C
ATOM	2738	N	LEU	B	429	24.942	1.116	14.863	1.00	25.45	N
ATOM	2739	CA	LEU	B	429	24.136	0.050	14.231	1.00	26.68	C
ATOM	2740	C	LEU	B	429	23.025	-0.498	15.122	1.00	24.43	C
ATOM	2741	O	LEU	B	429	21.920	-0.832	14.676	1.00	26.67	O
ATOM	2742	CB	LEU	B	429	25.060	-1.141	13.852	1.00	26.02	C
ATOM	2743	CG	LEU	B	429	25.945	-0.808	12.624	1.00	29.17	C
ATOM	2744	CD1	LEU	B	429	27.103	-1.786	12.580	1.00	27.09	C
ATOM	2745	CD2	LEU	B	429	25.074	-0.793	11.394	1.00	22.87	C
ATOM	2746	N	ALA	B	430	23.282	-0.586	16.405	1.00	26.72	N
ATOM	2747	CA	ALA	B	430	22.295	-1.104	17.364	1.00	29.50	C
ATOM	2748	C	ALA	B	430	21.126	-0.148	17.507	1.00	29.75	C
ATOM	2749	O	ALA	B	430	19.964	-0.536	17.409	1.00	23.47	O
ATOM	2750	CB	ALA	B	430	22.972	-1.390	18.715	1.00	27.79	C
ATOM	2751	N	THR	B	431	21.416	1.167	17.562	1.00	29.22	N
ATOM	2752	CA	THR	B	431	20.314	2.136	17.631	1.00	31.78	C
ATOM	2753	C	THR	B	431	19.545	2.182	16.320	1.00	27.18	C
ATOM	2754	O	THR	B	431	18.306	2.273	16.230	1.00	24.27	O
ATOM	2755	CB	THR	B	431	20.930	3.480	18.065	1.00	25.05	C
ATOM	2756	OG1	THR	B	431	21.794	3.282	19.200	1.00	29.32	O
ATOM	2757	CG2	THR	B	431	19.789	4.449	18.369	1.00	29.50	C
ATOM	2758	N	THR	B	432	20.253	2.060	15.176	1.00	24.95	N
ATOM	2759	CA	THR	B	432	19.608	2.011	13.880	1.00	25.81	C
ATOM	2760	C	THR	B	432	18.652	0.807	13.882	1.00	27.63	C
ATOM	2761	O	THR	B	432	17.530	0.895	13.396	1.00	25.14	O
ATOM	2762	CB	THR	B	432	20.600	1.774	12.727	1.00	26.18	C
ATOM	2763	OG1	THR	B	432	21.520	2.903	12.755	1.00	23.04	O
ATOM	2764	CG2	THR	B	432	19.956	1.648	11.351	1.00	26.93	C
ATOM	2765	N	SER	B	433	19.157	-0.324	14.394	1.00	29.09	N

ATOM	2766	CA	SER	B	433	18.269	-1.504	14.469	1.00	29.37	C
ATOM	2767	C	SER	B	433	17.002	-1.256	15.252	1.00	28.81	C
ATOM	2768	O	SER	B	433	15.971	-1.823	14.883	1.00	32.18	O
ATOM	2769	CB	SER	B	433	18.990	-2.672	15.172	1.00	31.10	C
ATOM	2770	OG	SER	B	433	20.020	-3.015	14.264	1.00	27.47	O
ATOM	2771	N	ARG	B	434	17.085	-0.514	16.358	1.00	29.90	N
ATOM	2772	CA	ARG	B	434	15.871	-0.260	17.147	1.00	34.41	C
ATOM	2773	C	ARG	B	434	14.859	0.554	16.363	1.00	35.22	C
ATOM	2774	O	ARG	B	434	13.636	0.377	16.433	1.00	31.25	O
ATOM	2775	CB	ARG	B	434	16.264	0.421	18.463	1.00	32.44	C
ATOM	2776	CG	ARG	B	434	15.008	0.863	19.162	1.00	45.34	C
ATOM	2777	CD	ARG	B	434	14.064	0.035	19.924	1.00	48.18	C
ATOM	2778	NE	ARG	B	434	13.120	-0.900	19.363	1.00	48.77	N
ATOM	2779	CZ	ARG	B	434	11.922	-1.055	19.948	1.00	56.45	C
ATOM	2780	NH1	ARG	B	434	11.626	-0.316	21.025	1.00	59.27	N
ATOM	2781	NH2	ARG	B	434	11.041	-1.928	19.478	1.00	58.02	N
ATOM	2782	N	PHE	B	435	15.369	1.546	15.604	1.00	32.09	N
ATOM	2783	CA	PHE	B	435	14.458	2.349	14.785	1.00	28.44	C
ATOM	2784	C	PHE	B	435	13.872	1.440	13.694	1.00	28.71	C
ATOM	2785	O	PHE	B	435	12.697	1.557	13.389	1.00	28.96	O
ATOM	2786	CB	PHE	B	435	15.140	3.558	14.169	1.00	27.08	C
ATOM	2787	CG	PHE	B	435	15.381	4.716	15.144	1.00	25.10	C
ATOM	2788	CD1	PHE	B	435	14.324	5.372	15.755	1.00	27.67	C
ATOM	2789	CD2	PHE	B	435	16.659	5.107	15.458	1.00	24.73	C
ATOM	2790	CE1	PHE	B	435	14.541	6.418	16.628	1.00	23.09	C
ATOM	2791	CE2	PHE	B	435	16.905	6.177	16.313	1.00	28.72	C
ATOM	2792	CZ	PHE	B	435	15.844	6.840	16.893	1.00	24.31	C
ATOM	2793	N	ARG	B	436	14.642	0.486	13.166	1.00	29.19	N
ATOM	2794	CA	ARG	B	436	14.127	-0.445	12.165	1.00	30.07	C
ATOM	2795	C	ARG	B	436	13.033	-1.316	12.792	1.00	31.36	C
ATOM	2796	O	ARG	B	436	11.960	-1.486	12.193	1.00	29.11	O
ATOM	2797	CB	ARG	B	436	15.241	-1.335	11.584	1.00	31.22	C
ATOM	2798	CG	ARG	B	436	14.762	-2.349	10.518	1.00	31.92	C
ATOM	2799	CD	ARG	B	436	15.848	-3.424	10.281	1.00	34.42	C
ATOM	2800	NE	ARG	B	436	17.060	-2.694	9.959	1.00	41.51	N
ATOM	2801	CZ	ARG	B	436	18.212	-2.827	10.627	1.00	39.46	C
ATOM	2802	NH1	ARG	B	436	18.314	-3.685	11.621	1.00	36.97	N
ATOM	2803	NH2	ARG	B	436	19.220	-2.051	10.264	1.00	40.73	N
ATOM	2804	N	GLU	B	437	13.276	-1.754	14.024	1.00	32.14	N
ATOM	2805	CA	GLU	B	437	12.273	-2.605	14.702	1.00	34.87	C
ATOM	2806	C	GLU	B	437	10.983	-1.853	14.954	1.00	33.57	C
ATOM	2807	O	GLU	B	437	9.862	-2.362	14.906	1.00	33.90	O
ATOM	2808	CB	GLU	B	437	12.871	-3.185	15.973	1.00	40.30	C
ATOM	2809	CG	GLU	B	437	13.862	-4.312	15.686	1.00	49.69	C
ATOM	2810	CD	GLU	B	437	14.896	-4.501	16.779	1.00	57.75	C
ATOM	2811	OE1	GLU	B	437	14.545	-4.433	17.989	1.00	58.57	O
ATOM	2812	OE2	GLU	B	437	16.079	-4.729	16.401	1.00	58.23	O
ATOM	2813	N	LEU	B	438	11.077	-0.550	15.238	1.00	29.78	N
ATOM	2814	CA	LEU	B	438	9.938	0.307	15.445	1.00	29.52	C
ATOM	2815	C	LEU	B	438	9.291	0.765	14.145	1.00	26.28	C
ATOM	2816	O	LEU	B	438	8.235	1.397	14.169	1.00	27.56	O
ATOM	2817	CB	LEU	B	438	10.391	1.566	16.229	1.00	33.11	C
ATOM	2818	CG	LEU	B	438	10.412	1.409	17.743	1.00	39.39	C
ATOM	2819	CD1	LEU	B	438	11.110	2.613	18.358	1.00	40.38	C
ATOM	2820	CD2	LEU	B	438	8.982	1.266	18.276	1.00	37.45	C
ATOM	2821	N	LYS	B	439	9.903	0.495	12.993	1.00	28.35	N
ATOM	2822	CA	LYS	B	439	9.414	0.881	11.690	1.00	27.73	C
ATOM	2823	C	LYS	B	439	9.217	2.408	11.606	1.00	25.44	C
ATOM	2824	O	LYS	B	439	8.169	2.940	11.257	1.00	23.93	O
ATOM	2825	CB	LYS	B	439	8.109	0.164	11.308	1.00	30.79	C
ATOM	2826	CG	LYS	B	439	8.369	-1.324	10.989	1.00	36.88	C
ATOM	2827	CD	LYS	B	439	7.060	-2.021	10.634	1.00	38.92	C
ATOM	2828	CE	LYS	B	439	7.212	-3.540	10.639	1.00	44.57	C
ATOM	2829	NZ	LYS	B	439	6.192	-4.182	9.749	1.00	50.78	N
ATOM	2830	N	LEU	B	440	10.270	3.104	12.031	1.00	26.36	N
ATOM	2831	CA	LEU	B	440	10.303	4.570	12.030	1.00	23.78	C
ATOM	2832	C	LEU	B	440	9.932	5.079	10.654	1.00	24.55	C
ATOM	2833	O	LEU	B	440	10.571	4.653	9.672	1.00	26.01	O
ATOM	2834	CB	LEU	B	440	11.749	5.038	12.352	1.00	25.25	C
ATOM	2835	CG	LEU	B	440	11.887	6.587	12.440	1.00	23.71	C
ATOM	2836	CD1	LEU	B	440	11.161	7.175	13.632	1.00	19.69	C
ATOM	2837	CD2	LEU	B	440	13.377	6.923	12.400	1.00	23.09	C
ATOM	2838	N	GLN	B	441	8.957	5.976	10.586	1.00	20.88	N
ATOM	2839	CA	GLN	B	441	8.526	6.530	9.294	1.00	27.60	C
ATOM	2840	C	GLN	B	441	9.260	7.828	8.987	1.00	27.63	C
ATOM	2841	O	GLN	B	441	9.778	8.510	9.885	1.00	23.77	O
ATOM	2842	CB	GLN	B	441	7.025	6.818	9.355	1.00	24.97	C

ATOM	2843	CG	GLN	B	441	6.217	5.554	9.658	1.00	33.92	C
ATOM	2844	CD	GLN	B	441	6.418	4.515	8.568	1.00	42.79	C
ATOM	2845	OE1	GLN	B	441	5.880	4.786	7.490	1.00	49.00	O
ATOM	2846	NE2	GLN	B	441	7.165	3.441	8.802	1.00	47.31	N
ATOM	2847	N	HIS	B	442	9.306	8.219	7.731	1.00	26.50	N
ATOM	2848	CA	HIS	B	442	10.021	9.423	7.313	1.00	29.05	C
ATOM	2849	C	HIS	B	442	9.527	10.660	8.021	1.00	24.51	C
ATOM	2850	O	HIS	B	442	10.388	11.418	8.526	1.00	25.18	O
ATOM	2851	CB	HIS	B	442	9.996	9.539	5.768	1.00	31.83	C
ATOM	2852	CG	HIS	B	442	10.894	10.622	5.225	1.00	33.00	C
ATOM	2853	ND1	HIS	B	442	12.242	10.727	5.455	1.00	34.94	N
ATOM	2854	CD2	HIS	B	442	10.581	11.678	4.438	1.00	34.09	C
ATOM	2855	CE1	HIS	B	442	12.715	11.799	4.844	1.00	34.42	C
ATOM	2856	NE2	HIS	B	442	11.725	12.403	4.214	1.00	31.06	N
ATOM	2857	N	LYS	B	443	8.232	10.903	8.167	1.00	23.03	N
ATOM	2858	CA	LYS	B	443	7.739	12.085	8.832	1.00	23.66	C
ATOM	2859	C	LYS	B	443	8.036	12.057	10.336	1.00	22.88	C
ATOM	2860	O	LYS	B	443	8.109	13.134	10.934	1.00	19.97	O
ATOM	2861	CB	LYS	B	443	6.246	12.410	8.563	1.00	26.75	C
ATOM	2862	CG	LYS	B	443	6.009	12.667	7.064	1.00	31.03	C
ATOM	2863	CD	LYS	B	443	4.505	12.888	6.794	1.00	33.11	C
ATOM	2864	CE	LYS	B	443	4.304	13.255	5.318	1.00	45.60	C
ATOM	2865	NZ	LYS	B	443	2.834	13.347	4.991	1.00	46.60	N
ATOM	2866	N	GLU	B	444	8.115	10.869	10.920	1.00	21.21	N
ATOM	2867	CA	GLU	B	444	8.434	10.812	12.379	1.00	18.69	C
ATOM	2868	C	GLU	B	444	9.919	11.207	12.511	1.00	21.45	C
ATOM	2869	O	GLU	B	444	10.279	12.011	13.370	1.00	19.10	O
ATOM	2870	CB	GLU	B	444	8.275	9.389	12.932	1.00	21.53	C
ATOM	2871	CG	GLU	B	444	6.788	8.971	12.978	1.00	25.64	C
ATOM	2872	CD	GLU	B	444	6.612	7.492	13.273	1.00	24.94	C
ATOM	2873	OE1	GLU	B	444	7.483	6.666	12.982	1.00	24.73	O
ATOM	2874	OE2	GLU	B	444	5.585	7.165	13.884	1.00	26.20	O
ATOM	2875	N	TYR	B	445	10.776	10.716	11.656	1.00	20.35	N
ATOM	2876	CA	TYR	B	445	12.195	11.016	11.602	1.00	23.29	C
ATOM	2877	C	TYR	B	445	12.440	12.531	11.488	1.00	25.07	C
ATOM	2878	O	TYR	B	445	13.283	13.083	12.191	1.00	22.54	O
ATOM	2879	CB	TYR	B	445	12.905	10.299	10.462	1.00	23.22	C
ATOM	2880	CG	TYR	B	445	14.154	10.963	9.926	1.00	25.12	C
ATOM	2881	CD1	TYR	B	445	15.329	10.898	10.683	1.00	26.68	C
ATOM	2882	CD2	TYR	B	445	14.166	11.619	8.682	1.00	25.12	C
ATOM	2883	CE1	TYR	B	445	16.486	11.480	10.236	1.00	26.30	C
ATOM	2884	CE2	TYR	B	445	15.346	12.173	8.238	1.00	25.76	C
ATOM	2885	CZ	TYR	B	445	16.471	12.145	9.018	1.00	25.11	C
ATOM	2886	OH	TYR	B	445	17.680	12.652	8.602	1.00	32.57	O
ATOM	2887	N	LEU	B	446	11.689	13.181	10.602	1.00	22.15	N
ATOM	2888	CA	LEU	B	446	11.848	14.616	10.461	1.00	21.36	C
ATOM	2889	C	LEU	B	446	11.530	15.345	11.760	1.00	19.59	C
ATOM	2890	O	LEU	B	446	12.237	16.275	12.130	1.00	19.63	O
ATOM	2891	CB	LEU	B	446	10.902	15.194	9.383	1.00	24.06	C
ATOM	2892	CG	LEU	B	446	11.156	14.620	7.956	1.00	25.43	C
ATOM	2893	CD1	LEU	B	446	10.056	15.081	6.999	1.00	29.92	C
ATOM	2894	CD2	LEU	B	446	12.564	14.978	7.528	1.00	27.33	C
ATOM	2895	N	CYS	B	447	10.480	14.946	12.463	1.00	18.44	N
ATOM	2896	CA	CYS	B	447	10.110	15.624	13.696	1.00	16.12	C
ATOM	2897	C	CYS	B	447	11.221	15.376	14.748	1.00	18.28	C
ATOM	2898	O	CYS	B	447	11.512	16.262	15.514	1.00	17.67	O
ATOM	2899	CB	CYS	B	447	8.771	15.099	14.240	1.00	17.37	C
ATOM	2900	SG	CYS	B	447	7.391	15.722	13.134	1.00	21.76	S
ATOM	2901	N	VAL	B	448	11.621	14.089	14.879	1.00	19.27	N
ATOM	2902	CA	VAL	B	448	12.621	13.830	15.948	1.00	18.83	C
ATOM	2903	C	VAL	B	448	13.905	14.585	15.713	1.00	21.13	C
ATOM	2904	O	VAL	B	448	14.520	15.072	16.666	1.00	19.08	O
ATOM	2905	CB	VAL	B	448	12.846	12.292	15.982	1.00	25.15	C
ATOM	2906	CG1	VAL	B	448	13.955	11.953	16.955	1.00	29.45	C
ATOM	2907	CG2	VAL	B	448	11.498	11.659	16.336	1.00	21.83	C
ATOM	2908	N	LYS	B	449	14.355	14.647	14.437	1.00	18.13	N
ATOM	2909	CA	LYS	B	449	15.601	15.404	14.161	1.00	17.61	C
ATOM	2910	C	LYS	B	449	15.428	16.871	14.558	1.00	20.56	C
ATOM	2911	O	LYS	B	449	16.375	17.491	15.076	1.00	19.67	O
ATOM	2912	CB	LYS	B	449	16.004	15.195	12.699	1.00	17.60	C
ATOM	2913	CG	LYS	B	449	17.350	15.751	12.324	1.00	20.54	C
ATOM	2914	CD	LYS	B	449	17.812	15.029	11.026	1.00	24.11	C
ATOM	2915	CE	LYS	B	449	16.863	15.527	9.915	1.00	23.93	C
ATOM	2916	NZ	LYS	B	449	17.613	15.786	8.664	1.00	28.21	N
ATOM	2917	N	ALA	B	450	14.262	17.461	14.244	1.00	16.41	N
ATOM	2918	CA	ALA	B	450	14.037	18.851	14.648	1.00	18.74	C
ATOM	2919	C	ALA	B	450	14.000	18.929	16.174	1.00	18.63	C

ATOM	2920	O	ALA	B	450	14.510	19.892	16.771	1.00	20.03	O
ATOM	2921	CB	ALA	B	450	12.731	19.415	14.050	1.00	17.47	C
ATOM	2922	N	MET	B	451	13.495	17.931	16.883	1.00	17.51	N
ATOM	2923	CA	MET	B	451	13.502	17.947	18.329	1.00	18.37	C
ATOM	2924	C	MET	B	451	14.924	17.871	18.885	1.00	17.64	C
ATOM	2925	O	MET	B	451	15.198	18.573	19.865	1.00	20.15	O
ATOM	2926	CB	MET	B	451	12.672	16.774	18.885	1.00	19.94	C
ATOM	2927	CG	MET	B	451	11.204	17.051	18.498	1.00	27.03	C
ATOM	2928	SD	MET	B	451	10.035	15.686	18.784	1.00	32.64	S
ATOM	2929	CE	MET	B	451	10.922	14.995	20.161	1.00	27.86	C
ATOM	2930	N	ILE	B	452	15.819	17.142	18.234	1.00	17.42	N
ATOM	2931	CA	ILE	B	452	17.198	17.097	18.705	1.00	18.96	C
ATOM	2932	C	ILE	B	452	17.806	18.479	18.667	1.00	21.80	C
ATOM	2933	O	ILE	B	452	18.436	18.991	19.621	1.00	23.30	O
ATOM	2934	CB	ILE	B	452	17.989	16.101	17.833	1.00	19.88	C
ATOM	2935	CG1	ILE	B	452	17.450	14.701	18.126	1.00	21.76	C
ATOM	2936	CG2	ILE	B	452	19.497	16.199	18.120	1.00	18.62	C
ATOM	2937	CD1	ILE	B	452	18.112	13.672	17.197	1.00	22.87	C
ATOM	2938	N	LEU	B	453	17.579	19.179	17.567	1.00	18.54	N
ATOM	2939	CA	LEU	B	453	18.132	20.547	17.476	1.00	17.52	C
ATOM	2940	C	LEU	B	453	17.574	21.466	18.543	1.00	22.82	C
ATOM	2941	O	LEU	B	453	18.276	22.272	19.181	1.00	20.30	O
ATOM	2942	CB	LEU	B	453	17.717	21.154	16.125	1.00	19.07	C
ATOM	2943	CG	LEU	B	453	18.042	22.652	15.950	1.00	18.04	C
ATOM	2944	CD1	LEU	B	453	19.517	23.012	15.887	1.00	22.50	C
ATOM	2945	CD2	LEU	B	453	17.374	23.159	14.663	1.00	22.28	C
ATOM	2946	N	LEU	B	454	16.234	21.381	18.711	1.00	17.98	N
ATOM	2947	CA	LEU	B	454	15.634	22.323	19.641	1.00	21.35	C
ATOM	2948	C	LEU	B	454	15.780	22.004	21.104	1.00	23.61	C
ATOM	2949	O	LEU	B	454	15.595	22.945	21.897	1.00	25.52	O
ATOM	2950	CB	LEU	B	454	14.140	22.453	19.270	1.00	20.71	C
ATOM	2951	CG	LEU	B	454	13.833	22.975	17.887	1.00	20.30	C
ATOM	2952	CD1	LEU	B	454	12.347	22.881	17.610	1.00	23.20	C
ATOM	2953	CD2	LEU	B	454	14.317	24.430	17.695	1.00	21.88	C
ATOM	2954	N	ASN	B	455	16.062	20.765	21.445	1.00	21.94	N
ATOM	2955	CA	ASN	B	455	16.081	20.351	22.852	1.00	28.13	C
ATOM	2956	C	ASN	B	455	17.425	19.900	23.406	1.00	27.63	C
ATOM	2957	O	ASN	B	455	17.491	19.519	24.587	1.00	38.60	O
ATOM	2958	CB	ASN	B	455	15.361	18.967	22.776	1.00	33.09	C
ATOM	2959	CG	ASN	B	455	15.175	18.151	24.024	1.00	46.53	C
ATOM	2960	OD1	ASN	B	455	15.470	16.948	24.077	1.00	43.08	O
ATOM	2961	ND2	ASN	B	455	14.708	18.808	25.080	1.00	40.09	N
ATOM	2962	N	SER	B	456	18.439	19.912	22.560	1.00	24.13	N
ATOM	2963	CA	SER	B	456	19.638	19.252	23.128	1.00	30.74	C
ATOM	2964	C	SER	B	456	20.506	20.033	24.059	1.00	31.89	C
ATOM	2965	O	SER	B	456	21.250	19.391	24.818	1.00	29.82	O
ATOM	2966	CB	SER	B	456	20.343	18.604	21.921	1.00	31.07	C
ATOM	2967	OG	SER	B	456	19.446	17.466	21.649	1.00	29.71	O
ATOM	2968	N	ALA	B	457	20.322	21.349	24.098	1.00	27.18	N
ATOM	2969	CA	ALA	B	457	21.221	22.116	24.944	1.00	33.46	C
ATOM	2970	C	ALA	B	457	21.155	21.687	26.401	1.00	35.06	C
ATOM	2971	O	ALA	B	457	20.099	21.737	27.028	1.00	34.11	O
ATOM	2972	CB	ALA	B	457	20.928	23.610	24.809	1.00	39.56	C
ATOM	2973	N	MET	B	458	22.347	21.591	27.008	1.00	35.72	N
ATOM	2974	CA	MET	B	458	22.393	21.244	28.430	1.00	29.71	C
ATOM	2975	C	MET	B	458	22.393	22.505	29.298	1.00	42.19	C
ATOM	2976	O	MET	B	458	22.691	23.569	28.725	1.00	41.34	O
ATOM	2977	CB	MET	B	458	23.607	20.386	28.739	1.00	38.90	C
ATOM	2978	CG	MET	B	458	23.552	18.990	28.158	1.00	35.74	C
ATOM	2979	SD	MET	B	458	22.267	17.944	28.833	1.00	32.79	S
ATOM	2980	CE	MET	B	458	22.653	17.715	30.567	1.00	35.81	C
ATOM	2981	N	ALA	B	469	12.103	36.034	25.966	1.00	54.31	N
ATOM	2982	CA	ALA	B	469	11.314	36.184	24.740	1.00	55.41	C
ATOM	2983	C	ALA	B	469	11.762	35.123	23.727	1.00	54.41	C
ATOM	2984	O	ALA	B	469	10.971	34.426	23.100	1.00	53.37	O
ATOM	2985	CB	ALA	B	469	11.481	37.560	24.148	1.00	56.77	C
ATOM	2986	N	SER	B	470	13.092	35.091	23.569	1.00	49.02	N
ATOM	2987	CA	SER	B	470	13.677	34.082	22.669	1.00	46.55	C
ATOM	2988	C	SER	B	470	13.409	32.747	23.368	1.00	43.33	C
ATOM	2989	O	SER	B	470	12.951	31.791	22.750	1.00	43.16	O
ATOM	2990	CB	SER	B	470	15.155	34.311	22.434	1.00	47.34	C
ATOM	2991	OG	SER	B	470	15.760	33.317	21.622	1.00	44.03	O
ATOM	2992	N	SER	B	471	13.697	32.727	24.670	1.00	43.18	N
ATOM	2993	CA	SER	B	471	13.459	31.548	25.484	1.00	47.51	C
ATOM	2994	C	SER	B	471	12.028	31.052	25.311	1.00	48.84	C
ATOM	2995	O	SER	B	471	11.830	29.892	24.970	1.00	49.05	O
ATOM	2996	CB	SER	B	471	13.659	31.871	26.972	1.00	50.06	C

ATOM	2997	OG	SER	B	471	13.172	30.756	27.719	1.00	53.89	O
ATOM	2998	N	ARG	B	472	11.039	31.929	25.499	1.00	48.98	N
ATOM	2999	CA	ARG	B	472	9.646	31.497	25.367	1.00	53.12	C
ATOM	3000	C	ARG	B	472	9.241	31.130	23.951	1.00	47.16	C
ATOM	3001	O	ARG	B	472	8.406	30.234	23.746	1.00	45.19	O
ATOM	3002	CB	ARG	B	472	8.682	32.409	26.092	1.00	59.26	C
ATOM	3003	CG	ARG	B	472	8.701	33.858	25.712	1.00	66.84	C
ATOM	3004	CD	ARG	B	472	7.696	34.185	24.628	1.00	72.82	C
ATOM	3005	NE	ARG	B	472	8.310	34.518	23.345	1.00	75.75	N
ATOM	3006	CZ	ARG	B	472	7.902	35.580	22.643	1.00	78.82	C
ATOM	3007	NH1	ARG	B	472	6.926	36.353	23.113	1.00	78.17	N
ATOM	3008	NH2	ARG	B	472	8.489	35.858	21.486	1.00	79.34	N
ATOM	3009	N	LYS	B	473	9.839	31.689	22.926	1.00	44.86	N
ATOM	3010	CA	LYS	B	473	9.671	31.416	21.515	1.00	46.23	C
ATOM	3011	C	LYS	B	473	10.197	30.019	21.128	1.00	42.00	C
ATOM	3012	O	LYS	B	473	9.662	29.326	20.243	1.00	35.23	O
ATOM	3013	CB	LYS	B	473	10.489	32.442	20.719	1.00	51.12	C
ATOM	3014	CG	LYS	B	473	10.662	32.139	19.247	1.00	57.47	C
ATOM	3015	CD	LYS	B	473	9.654	32.805	18.340	1.00	62.58	C
ATOM	3016	CE	LYS	B	473	9.772	34.324	18.387	1.00	65.78	C
ATOM	3017	NZ	LYS	B	473	9.434	34.906	17.052	1.00	69.85	N
ATOM	3018	N	LEU	B	474	11.284	29.623	21.780	1.00	42.37	N
ATOM	3019	CA	LEU	B	474	11.911	28.315	21.595	1.00	36.73	C
ATOM	3020	C	LEU	B	474	10.996	27.226	22.136	1.00	38.16	C
ATOM	3021	O	LEU	B	474	10.710	26.224	21.491	1.00	31.82	O
ATOM	3022	CB	LEU	B	474	13.219	28.190	22.362	1.00	36.66	C
ATOM	3023	CG	LEU	B	474	13.947	26.847	22.332	1.00	36.07	C
ATOM	3024	CD1	LEU	B	474	14.091	26.373	20.883	1.00	28.80	C
ATOM	3025	CD2	LEU	B	474	15.306	26.945	23.003	1.00	29.09	C
ATOM	3026	N	ALA	B	475	10.549	27.399	23.382	1.00	37.80	N
ATOM	3027	CA	ALA	B	475	9.639	26.426	24.016	1.00	35.34	C
ATOM	3028	C	ALA	B	475	8.408	26.263	23.146	1.00	31.75	C
ATOM	3029	O	ALA	B	475	7.818	25.186	22.971	1.00	35.23	O
ATOM	3030	CB	ALA	B	475	9.254	27.052	25.357	1.00	37.48	C
ATOM	3031	N	HIS	B	476	7.906	27.334	22.557	1.00	30.35	N
ATOM	3032	CA	HIS	B	476	6.768	27.338	21.678	1.00	32.13	C
ATOM	3033	C	HIS	B	476	7.044	26.567	20.382	1.00	34.39	C
ATOM	3034	O	HIS	B	476	6.185	25.823	19.921	1.00	29.76	O
ATOM	3035	CB	HIS	B	476	6.352	28.769	21.387	1.00	39.31	C
ATOM	3036	CG	HIS	B	476	5.245	28.882	20.399	1.00	39.01	C
ATOM	3037	ND1	HIS	B	476	3.911	28.701	20.707	1.00	42.30	N
ATOM	3038	CD2	HIS	B	476	5.284	29.189	19.083	1.00	44.66	C
ATOM	3039	CE1	HIS	B	476	3.193	28.884	19.612	1.00	45.07	C
ATOM	3040	NE2	HIS	B	476	4.002	29.179	18.613	1.00	43.00	N
ATOM	3041	N	LEU	B	477	8.207	26.755	19.761	1.00	31.57	N
ATOM	3042	CA	LEU	B	477	8.506	26.025	18.508	1.00	30.52	C
ATOM	3043	C	LEU	B	477	8.673	24.539	18.821	1.00	27.67	C
ATOM	3044	O	LEU	B	477	8.225	23.646	18.100	1.00	29.59	O
ATOM	3045	CB	LEU	B	477	9.725	26.692	17.874	1.00	30.28	C
ATOM	3046	CG	LEU	B	477	10.411	25.953	16.725	1.00	34.16	C
ATOM	3047	CD1	LEU	B	477	9.468	25.609	15.578	1.00	32.42	C
ATOM	3048	CD2	LEU	B	477	11.599	26.793	16.232	1.00	35.60	C
ATOM	3049	N	LEU	B	478	9.314	24.209	19.935	1.00	25.22	N
ATOM	3050	CA	LEU	B	478	9.472	22.833	20.362	1.00	27.05	C
ATOM	3051	C	LEU	B	478	8.133	22.133	20.616	1.00	30.54	C
ATOM	3052	O	LEU	B	478	7.877	20.992	20.196	1.00	25.43	O
ATOM	3053	CB	LEU	B	478	10.299	22.798	21.639	1.00	30.69	C
ATOM	3054	CG	LEU	B	478	10.473	21.437	22.277	1.00	28.12	C
ATOM	3055	CD1	LEU	B	478	10.964	20.403	21.245	1.00	33.21	C
ATOM	3056	CD2	LEU	B	478	11.476	21.530	23.401	1.00	34.87	C
ATOM	3057	N	ASN	B	479	7.226	22.877	21.250	1.00	28.17	N
ATOM	3058	CA	ASN	B	479	5.867	22.367	21.472	1.00	30.21	C
ATOM	3059	C	ASN	B	479	5.180	22.087	20.143	1.00	22.88	C
ATOM	3060	O	ASN	B	479	4.440	21.106	20.025	1.00	24.27	O
ATOM	3061	CB	ASN	B	479	5.035	23.378	22.286	1.00	32.73	C
ATOM	3062	CG	ASN	B	479	5.534	23.365	23.736	1.00	40.31	C
ATOM	3063	OD1	ASN	B	479	5.903	22.336	24.293	1.00	37.59	O
ATOM	3064	ND2	ASN	B	479	5.552	24.558	24.327	1.00	44.28	N
ATOM	3065	N	ALA	B	480	5.386	22.898	19.115	1.00	20.99	N
ATOM	3066	CA	ALA	B	480	4.786	22.735	17.811	1.00	23.95	C
ATOM	3067	C	ALA	B	480	5.353	21.489	17.156	1.00	21.66	C
ATOM	3068	O	ALA	B	480	4.627	20.763	16.535	1.00	20.82	O
ATOM	3069	CB	ALA	B	480	5.088	23.971	16.948	1.00	25.20	C
ATOM	3070	N	VAL	B	481	6.694	21.289	17.289	1.00	20.53	N
ATOM	3071	CA	VAL	B	481	7.239	20.054	16.694	1.00	17.55	C
ATOM	3072	C	VAL	B	481	6.697	18.835	17.451	1.00	16.82	C
ATOM	3073	O	VAL	B	481	6.442	17.849	16.773	1.00	22.41	O

ATOM	3074	CB	VAL	B	481	8.766	20.120	16.684	1.00	22.50	C
ATOM	3075	CG1	VAL	B	481	9.356	18.798	16.125	1.00	23.47	C
ATOM	3076	CG2	VAL	B	481	9.200	21.229	15.733	1.00	23.62	C
ATOM	3077	N	THR	B	482	6.556	18.883	18.786	1.00	18.00	N
ATOM	3078	CA	THR	B	482	5.949	17.738	19.474	1.00	22.76	C
ATOM	3079	C	THR	B	482	4.543	17.467	18.948	1.00	22.09	C
ATOM	3080	O	THR	B	482	4.166	16.328	18.642	1.00	19.49	O
ATOM	3081	CB	THR	B	482	5.970	17.975	21.000	1.00	29.51	C
ATOM	3082	OG1	THR	B	482	7.324	18.198	21.397	1.00	27.76	O
ATOM	3083	CG2	THR	B	482	5.430	16.809	21.810	1.00	27.12	C
ATOM	3084	N	ASP	B	483	3.725	18.508	18.826	1.00	20.17	N
ATOM	3085	CA	ASP	B	483	2.359	18.365	18.301	1.00	24.13	C
ATOM	3086	C	ASP	B	483	2.323	17.762	16.911	1.00	22.27	C
ATOM	3087	O	ASP	B	483	1.429	16.997	16.549	1.00	26.19	O
ATOM	3088	CB	ASP	B	483	1.611	19.702	18.199	1.00	29.71	C
ATOM	3089	CG	ASP	B	483	1.102	20.228	19.515	1.00	36.10	C
ATOM	3090	OD1	ASP	B	483	0.857	19.405	20.430	1.00	31.63	O
ATOM	3091	OD2	ASP	B	483	0.970	21.472	19.657	1.00	33.72	O
ATOM	3092	N	ALA	B	484	3.317	18.110	16.081	1.00	22.75	N
ATOM	3093	CA	ALA	B	484	3.439	17.595	14.734	1.00	22.22	C
ATOM	3094	C	ALA	B	484	3.709	16.095	14.756	1.00	22.87	C
ATOM	3095	O	ALA	B	484	3.131	15.295	14.011	1.00	21.02	O
ATOM	3096	CB	ALA	B	484	4.572	18.329	14.022	1.00	26.05	C
ATOM	3097	N	LEU	B	485	4.629	15.757	15.672	1.00	20.98	N
ATOM	3098	CA	LEU	B	485	4.955	14.327	15.808	1.00	19.83	C
ATOM	3099	C	LEU	B	485	3.731	13.511	16.168	1.00	19.13	C
ATOM	3100	O	LEU	B	485	3.436	12.430	15.633	1.00	22.33	O
ATOM	3101	CB	LEU	B	485	6.135	14.140	16.787	1.00	21.40	C
ATOM	3102	CG	LEU	B	485	6.506	12.662	16.981	1.00	18.67	C
ATOM	3103	CD1	LEU	B	485	6.940	11.941	15.716	1.00	20.60	C
ATOM	3104	CD2	LEU	B	485	7.640	12.520	18.044	1.00	19.57	C
ATOM	3105	N	VAL	B	486	3.024	13.929	17.192	1.00	21.56	N
ATOM	3106	CA	VAL	B	486	1.795	13.296	17.709	1.00	20.68	C
ATOM	3107	C	VAL	B	486	0.791	13.215	16.567	1.00	25.17	C
ATOM	3108	O	VAL	B	486	0.171	12.182	16.301	1.00	24.38	O
ATOM	3109	CB	VAL	B	486	1.220	14.149	18.845	1.00	23.66	C
ATOM	3110	CG1	VAL	B	486	-0.238	13.813	19.229	1.00	24.83	C
ATOM	3111	CG2	VAL	B	486	2.045	14.002	20.124	1.00	21.63	C
ATOM	3112	N	TRP	B	487	0.674	14.343	15.830	1.00	21.96	N
ATOM	3113	CA	TRP	B	487	-0.236	14.324	14.653	1.00	25.74	C
ATOM	3114	C	TRP	B	487	0.196	13.325	13.619	1.00	26.02	C
ATOM	3115	O	TRP	B	487	-0.626	12.579	13.030	1.00	26.05	O
ATOM	3116	CB	TRP	B	487	-0.264	15.750	14.059	1.00	25.93	C
ATOM	3117	CG	TRP	B	487	-1.058	15.906	12.803	1.00	30.60	C
ATOM	3118	CD1	TRP	B	487	-2.409	16.096	12.721	1.00	37.56	C
ATOM	3119	CD2	TRP	B	487	-0.565	15.917	11.469	1.00	31.01	C
ATOM	3120	NE1	TRP	B	487	-2.779	16.218	11.394	1.00	40.01	N
ATOM	3121	CE2	TRP	B	487	-1.667	16.100	10.608	1.00	36.26	C
ATOM	3122	CE3	TRP	B	487	0.697	15.745	10.903	1.00	29.94	C
ATOM	3123	CZ2	TRP	B	487	-1.528	16.157	9.222	1.00	32.52	C
ATOM	3124	CZ3	TRP	B	487	0.838	15.816	9.534	1.00	37.87	C
ATOM	3125	CH2	TRP	B	487	-0.286	16.003	8.699	1.00	36.54	C
ATOM	3126	N	VAL	B	488	1.485	13.151	13.308	1.00	23.83	N
ATOM	3127	CA	VAL	B	488	2.006	12.204	12.360	1.00	21.03	C
ATOM	3128	C	VAL	B	488	1.740	10.761	12.832	1.00	26.30	C
ATOM	3129	O	VAL	B	488	1.293	9.887	12.075	1.00	25.72	O
ATOM	3130	CB	VAL	B	488	3.521	12.296	12.123	1.00	24.64	C
ATOM	3131	CG1	VAL	B	488	4.070	11.047	11.443	1.00	26.89	C
ATOM	3132	CG2	VAL	B	488	3.865	13.561	11.297	1.00	24.58	C
ATOM	3133	N	ILE	B	489	2.028	10.550	14.155	1.00	23.13	N
ATOM	3134	CA	ILE	B	489	1.765	9.180	14.666	1.00	22.06	C
ATOM	3135	C	ILE	B	489	0.256	8.881	14.538	1.00	24.87	C
ATOM	3136	O	ILE	B	489	-0.098	7.719	14.264	1.00	24.99	O
ATOM	3137	CB	ILE	B	489	2.177	9.090	16.134	1.00	26.08	C
ATOM	3138	CG1	ILE	B	489	3.734	9.132	16.232	1.00	22.32	C
ATOM	3139	CG2	ILE	B	489	1.641	7.941	16.945	1.00	22.95	C
ATOM	3140	CD1	ILE	B	489	4.210	9.443	17.653	1.00	20.14	C
ATOM	3141	N	ALA	B	490	-0.617	9.831	14.685	1.00	27.34	N
ATOM	3142	CA	ALA	B	490	-2.070	9.508	14.629	1.00	27.84	C
ATOM	3143	C	ALA	B	490	-2.537	9.090	13.265	1.00	34.80	C
ATOM	3144	O	ALA	B	490	-3.547	8.355	13.114	1.00	31.94	O
ATOM	3145	CB	ALA	B	490	-2.880	10.619	15.276	1.00	28.91	C
ATOM	3146	N	LYS	B	491	-1.803	9.380	12.183	1.00	32.12	N
ATOM	3147	CA	LYS	B	491	-2.252	8.898	10.870	1.00	38.71	C
ATOM	3148	C	LYS	B	491	-1.972	7.420	10.669	1.00	34.00	C
ATOM	3149	O	LYS	B	491	-2.387	6.847	9.660	1.00	32.22	O
ATOM	3150	CB	LYS	B	491	-1.719	9.752	9.735	1.00	44.36	C

ATOM	3151	CG	LYS	B	491	-0.239	9.800	9.522	1.00	48.41	C
ATOM	3152	CD	LYS	B	491	0.171	11.178	8.977	1.00	49.59	C
ATOM	3153	CE	LYS	B	491	0.188	11.102	7.466	1.00	53.70	C
ATOM	3154	NZ	LYS	B	491	-0.254	12.384	6.856	1.00	55.43	N
ATOM	3155	N	SER	B	492	-1.400	6.696	11.641	1.00	28.99	N
ATOM	3156	CA	SER	B	492	-1.127	5.277	11.504	1.00	33.42	C
ATOM	3157	C	SER	B	492	-2.366	4.456	11.835	1.00	28.23	C
ATOM	3158	O	SER	B	492	-2.385	3.255	11.573	1.00	32.62	O
ATOM	3159	CB	SER	B	492	0.031	4.797	12.387	1.00	34.07	C
ATOM	3160	OG	SER	B	492	-0.338	4.812	13.756	1.00	35.52	O
ATOM	3161	N	GLY	B	493	-3.393	5.001	12.462	1.00	28.90	N
ATOM	3162	CA	GLY	B	493	-4.592	4.264	12.783	1.00	26.51	C
ATOM	3163	C	GLY	B	493	-4.559	3.393	14.015	1.00	31.70	C
ATOM	3164	O	GLY	B	493	-5.500	2.653	14.347	1.00	29.72	O
ATOM	3165	N	ILE	B	494	-3.498	3.487	14.799	1.00	30.49	N
ATOM	3166	CA	ILE	B	494	-3.394	2.642	16.006	1.00	26.38	C
ATOM	3167	C	ILE	B	494	-4.220	3.249	17.111	1.00	26.60	C
ATOM	3168	O	ILE	B	494	-4.643	4.399	16.977	1.00	25.72	O
ATOM	3169	CB	ILE	B	494	-1.928	2.494	16.410	1.00	29.64	C
ATOM	3170	CG1	ILE	B	494	-1.316	3.881	16.709	1.00	32.50	C
ATOM	3171	CG2	ILE	B	494	-1.153	1.759	15.340	1.00	29.24	C
ATOM	3172	CD1	ILE	B	494	0.167	3.779	17.077	1.00	31.75	C
ATOM	3173	N	SER	B	495	-4.533	2.484	18.155	1.00	22.01	N
ATOM	3174	CA	SER	B	495	-5.322	2.960	19.268	1.00	28.60	C
ATOM	3175	C	SER	B	495	-4.645	4.105	19.992	1.00	29.65	C
ATOM	3176	O	SER	B	495	-3.426	4.270	19.872	1.00	29.51	O
ATOM	3177	CB	SER	B	495	-5.519	1.793	20.264	1.00	28.32	C
ATOM	3178	OG	SER	B	495	-4.309	1.556	20.995	1.00	29.30	O
ATOM	3179	N	SER	B	496	-5.405	4.827	20.815	1.00	28.42	N
ATOM	3180	CA	SER	B	496	-4.872	5.920	21.606	1.00	33.49	C
ATOM	3181	C	SER	B	496	-3.787	5.454	22.560	1.00	31.99	C
ATOM	3182	O	SER	B	496	-2.732	6.047	22.697	1.00	28.33	O
ATOM	3183	CB	SER	B	496	-6.020	6.601	22.387	1.00	33.83	C
ATOM	3184	OG	SER	B	496	-5.368	7.596	23.174	1.00	42.49	O
ATOM	3185	N	GLN	B	497	-3.967	4.275	23.178	1.00	32.91	N
ATOM	3186	CA	GLN	B	497	-2.957	3.707	24.062	1.00	33.88	C
ATOM	3187	C	GLN	B	497	-1.693	3.419	23.254	1.00	29.03	C
ATOM	3188	O	GLN	B	497	-0.586	3.672	23.743	1.00	30.75	O
ATOM	3189	CB	GLN	B	497	-3.435	2.402	24.699	1.00	36.61	C
ATOM	3190	CG	GLN	B	497	-2.540	1.791	25.748	1.00	37.77	C
ATOM	3191	CD	GLN	B	497	-1.413	0.910	25.284	1.00	44.35	C
ATOM	3192	OE1	GLN	B	497	-1.374	0.429	24.150	1.00	47.20	O
ATOM	3193	NE2	GLN	B	497	-0.457	0.650	26.172	1.00	46.49	N
ATOM	3194	N	GLN	B	498	-1.822	2.882	22.033	1.00	27.21	N
ATOM	3195	CA	GLN	B	498	-0.667	2.636	21.202	1.00	25.33	C
ATOM	3196	C	GLN	B	498	-0.065	3.975	20.730	1.00	26.83	C
ATOM	3197	O	GLN	B	498	1.167	3.907	20.578	1.00	26.30	O
ATOM	3198	CB	GLN	B	498	-0.880	1.711	19.998	1.00	26.86	C
ATOM	3199	CG	GLN	B	498	-1.241	0.323	20.549	1.00	27.39	C
ATOM	3200	CD	GLN	B	498	0.010	-0.353	21.095	1.00	36.34	C
ATOM	3201	OE1	GLN	B	498	0.947	-0.562	20.310	1.00	40.62	O
ATOM	3202	NE2	GLN	B	498	0.096	-0.684	22.379	1.00	36.50	N
ATOM	3203	N	GLN	B	499	-0.885	5.011	20.559	1.00	24.02	N
ATOM	3204	CA	GLN	B	499	-0.308	6.296	20.125	1.00	22.80	C
ATOM	3205	C	GLN	B	499	0.661	6.807	21.224	1.00	23.57	C
ATOM	3206	O	GLN	B	499	1.774	7.246	20.920	1.00	23.90	O
ATOM	3207	CB	GLN	B	499	-1.341	7.409	19.895	1.00	27.44	C
ATOM	3208	CG	GLN	B	499	-2.178	7.291	18.606	1.00	32.73	C
ATOM	3209	CD	GLN	B	499	-3.283	8.331	18.529	1.00	37.67	C
ATOM	3210	OE1	GLN	B	499	-3.993	8.430	17.520	1.00	39.66	O
ATOM	3211	NE2	GLN	B	499	-3.543	9.159	19.560	1.00	31.52	N
ATOM	3212	N	SER	B	500	0.224	6.765	22.474	1.00	25.59	N
ATOM	3213	CA	SER	B	500	1.070	7.206	23.598	1.00	25.90	C
ATOM	3214	C	SER	B	500	2.331	6.356	23.682	1.00	25.66	C
ATOM	3215	O	SER	B	500	3.458	6.835	23.980	1.00	22.82	O
ATOM	3216	CB	SER	B	500	0.290	7.061	24.907	1.00	31.89	C
ATOM	3217	OG	SER	B	500	-0.676	8.089	25.040	1.00	36.59	O
ATOM	3218	N	MET	B	501	2.167	5.048	23.514	1.00	25.69	N
ATOM	3219	CA	MET	B	501	3.318	4.143	23.623	1.00	29.93	C
ATOM	3220	C	MET	B	501	4.360	4.391	22.538	1.00	28.16	C
ATOM	3221	O	MET	B	501	5.594	4.357	22.766	1.00	23.35	O
ATOM	3222	CB	MET	B	501	2.839	2.679	23.583	1.00	34.14	C
ATOM	3223	CG	MET	B	501	3.352	1.858	24.760	1.00	51.81	C
ATOM	3224	SD	MET	B	501	2.295	1.977	26.203	1.00	55.56	S
ATOM	3225	CE	MET	B	501	2.301	3.688	26.660	1.00	59.00	C
ATOM	3226	N	ARG	B	502	3.870	4.712	21.323	1.00	24.75	N
ATOM	3227	CA	ARG	B	502	4.763	4.948	20.191	1.00	22.72	C

ATOM	3228	C	ARG	B	502	5.566	6.239	20.402	1.00	20.84	C
ATOM	3229	O	ARG	B	502	6.783	6.283	20.126	1.00	22.79	O
ATOM	3230	CB	ARG	B	502	3.997	5.060	18.844	1.00	21.16	C
ATOM	3231	CG	ARG	B	502	4.991	5.295	17.692	1.00	25.92	C
ATOM	3232	CD	ARG	B	502	4.395	5.049	16.313	1.00	28.95	C
ATOM	3233	NE	ARG	B	502	5.357	5.004	15.238	1.00	23.66	N
ATOM	3234	CZ	ARG	B	502	6.164	4.003	14.897	1.00	27.73	C
ATOM	3235	NH1	ARG	B	502	6.991	4.154	13.877	1.00	22.39	N
ATOM	3236	NH2	ARG	B	502	6.231	2.829	15.534	1.00	30.80	N
ATOM	3237	N	LEU	B	503	4.858	7.238	20.884	1.00	18.40	N
ATOM	3238	CA	LEU	B	503	5.532	8.520	21.205	1.00	21.85	C
ATOM	3239	C	LEU	B	503	6.613	8.261	22.230	1.00	19.31	C
ATOM	3240	O	LEU	B	503	7.741	8.712	22.132	1.00	19.95	O
ATOM	3241	CB	LEU	B	503	4.485	9.527	21.670	1.00	20.32	C
ATOM	3242	CG	LEU	B	503	5.030	10.914	22.094	1.00	20.86	C
ATOM	3243	CD1	LEU	B	503	5.669	11.650	20.932	1.00	22.23	C
ATOM	3244	CD2	LEU	B	503	3.879	11.683	22.701	1.00	22.73	C
ATOM	3245	N	ALA	B	504	6.243	7.577	23.330	1.00	20.43	N
ATOM	3246	CA	ALA	B	504	7.227	7.276	24.372	1.00	23.26	C
ATOM	3247	C	ALA	B	504	8.379	6.431	23.864	1.00	23.81	C
ATOM	3248	O	ALA	B	504	9.581	6.708	24.146	1.00	22.74	O
ATOM	3249	CB	ALA	B	504	6.533	6.501	25.488	1.00	23.86	C
ATOM	3250	N	ASN	B	505	8.159	5.398	23.039	1.00	21.61	N
ATOM	3251	CA	ASN	B	505	9.259	4.578	22.525	1.00	22.57	C
ATOM	3252	C	ASN	B	505	10.180	5.384	21.611	1.00	23.21	C
ATOM	3253	O	ASN	B	505	11.424	5.219	21.617	1.00	22.51	O
ATOM	3254	CB	ASN	B	505	8.675	3.365	21.765	1.00	26.72	C
ATOM	3255	CG	ASN	B	505	8.271	2.267	22.745	1.00	34.58	C
ATOM	3256	OD1	ASN	B	505	8.957	1.971	23.718	1.00	40.44	O
ATOM	3257	ND2	ASN	B	505	7.152	1.635	22.496	1.00	33.99	N
ATOM	3258	N	LEU	B	506	9.602	6.259	20.763	1.00	21.36	N
ATOM	3259	CA	LEU	B	506	10.482	7.053	19.905	1.00	22.31	C
ATOM	3260	C	LEU	B	506	11.320	8.013	20.744	1.00	24.19	C
ATOM	3261	O	LEU	B	506	12.515	8.189	20.538	1.00	23.77	O
ATOM	3262	CB	LEU	B	506	9.658	7.870	18.898	1.00	22.24	C
ATOM	3263	CG	LEU	B	506	8.871	7.129	17.827	1.00	29.50	C
ATOM	3264	CD1	LEU	B	506	8.068	8.166	17.036	1.00	33.79	C
ATOM	3265	CD2	LEU	B	506	9.791	6.332	16.912	1.00	33.24	C
ATOM	3266	N	LEU	B	507	10.696	8.705	21.701	1.00	21.63	N
ATOM	3267	CA	LEU	B	507	11.471	9.694	22.481	1.00	25.03	C
ATOM	3268	C	LEU	B	507	12.444	8.987	23.394	1.00	23.77	C
ATOM	3269	O	LEU	B	507	13.501	9.548	23.706	1.00	26.25	O
ATOM	3270	CB	LEU	B	507	10.515	10.633	23.232	1.00	27.26	C
ATOM	3271	CG	LEU	B	507	9.592	11.371	22.233	1.00	29.67	C
ATOM	3272	CD1	LEU	B	507	8.764	12.382	22.956	1.00	29.27	C
ATOM	3273	CD2	LEU	B	507	10.372	12.022	21.097	1.00	31.99	C
ATOM	3274	N	MET	B	508	12.112	7.773	23.844	1.00	20.83	N
ATOM	3275	CA	MET	B	508	13.132	7.080	24.650	1.00	23.78	C
ATOM	3276	C	MET	B	508	14.390	6.726	23.848	1.00	29.09	C
ATOM	3277	O	MET	B	508	15.492	6.803	24.405	1.00	28.80	O
ATOM	3278	CB	MET	B	508	12.571	5.805	25.289	1.00	26.91	C
ATOM	3279	CG	MET	B	508	11.841	6.133	26.601	1.00	30.84	C
ATOM	3280	SD	MET	B	508	11.468	4.560	27.450	1.00	29.95	S
ATOM	3281	CE	MET	B	508	10.343	3.845	26.243	1.00	29.84	C
ATOM	3282	N	LEU	B	509	14.305	6.477	22.553	1.00	27.99	N
ATOM	3283	CA	LEU	B	509	15.424	6.228	21.679	1.00	29.96	C
ATOM	3284	C	LEU	B	509	16.285	7.458	21.470	1.00	30.52	C
ATOM	3285	O	LEU	B	509	17.483	7.306	21.166	1.00	27.74	O
ATOM	3286	CB	LEU	B	509	14.974	5.669	20.307	1.00	32.48	C
ATOM	3287	CG	LEU	B	509	14.638	4.173	20.309	1.00	33.77	C
ATOM	3288	CD1	LEU	B	509	14.129	3.823	18.931	1.00	34.29	C
ATOM	3289	CD2	LEU	B	509	15.854	3.403	20.830	1.00	37.61	C
ATOM	3290	N	LEU	B	510	15.836	8.680	21.726	1.00	26.40	N
ATOM	3291	CA	LEU	B	510	16.544	9.917	21.631	1.00	29.83	C
ATOM	3292	C	LEU	B	510	17.718	9.962	22.640	1.00	27.70	C
ATOM	3293	O	LEU	B	510	18.780	10.574	22.463	1.00	25.15	O
ATOM	3294	CB	LEU	B	510	15.679	11.127	21.928	1.00	37.31	C
ATOM	3295	CG	LEU	B	510	14.737	11.758	20.914	1.00	43.51	C
ATOM	3296	CD1	LEU	B	510	13.671	12.521	21.714	1.00	47.22	C
ATOM	3297	CD2	LEU	B	510	15.336	12.812	20.015	1.00	39.00	C
ATOM	3298	N	SER	B	511	17.483	9.251	23.788	1.00	25.53	N
ATOM	3299	CA	SER	B	511	18.540	9.158	24.767	1.00	22.45	C
ATOM	3300	C	SER	B	511	19.689	8.297	24.204	1.00	16.69	C
ATOM	3301	O	SER	B	511	20.855	8.465	24.528	1.00	21.23	O
ATOM	3302	CB	SER	B	511	18.121	8.283	25.975	1.00	25.55	C
ATOM	3303	OG	SER	B	511	19.264	8.432	26.827	1.00	37.78	O
ATOM	3304	N	HIS	B	512	19.300	7.293	23.385	1.00	18.67	N

ATOM	3305	CA	HIS	B	512	20.289	6.421	22.761	1.00	20.94	C
ATOM	3306	C	HIS	B	512	21.052	7.157	21.630	1.00	24.96	C
ATOM	3307	O	HIS	B	512	22.260	6.952	21.469	1.00	17.72	O
ATOM	3308	CB	HIS	B	512	19.656	5.159	22.182	1.00	21.42	C
ATOM	3309	CG	HIS	B	512	18.936	4.371	23.266	1.00	26.29	C
ATOM	3310	ND1	HIS	B	512	19.329	3.065	23.351	1.00	36.40	N
ATOM	3311	CD2	HIS	B	512	17.948	4.525	24.167	1.00	31.77	C
ATOM	3312	CE1	HIS	B	512	18.647	2.497	24.304	1.00	33.28	C
ATOM	3313	NE2	HIS	B	512	17.777	3.303	24.816	1.00	28.54	N
ATOM	3314	N	VAL	B	513	20.370	8.113	20.952	1.00	22.54	N
ATOM	3315	CA	VAL	B	513	21.080	8.894	19.944	1.00	23.43	C
ATOM	3316	C	VAL	B	513	22.010	9.865	20.659	1.00	25.90	C
ATOM	3317	O	VAL	B	513	23.177	10.063	20.292	1.00	19.83	O
ATOM	3318	CB	VAL	B	513	20.108	9.616	18.990	1.00	23.47	C
ATOM	3319	CG1	VAL	B	513	20.981	10.300	17.923	1.00	24.99	C
ATOM	3320	CG2	VAL	B	513	19.093	8.646	18.398	1.00	22.87	C
ATOM	3321	N	ARG	B	514	21.601	10.431	21.820	1.00	20.20	N
ATOM	3322	CA	ARG	B	514	22.454	11.311	22.586	1.00	19.38	C
ATOM	3323	C	ARG	B	514	23.722	10.555	23.082	1.00	20.72	C
ATOM	3324	O	ARG	B	514	24.780	11.111	23.070	1.00	19.22	O
ATOM	3325	CB	ARG	B	514	21.775	11.826	23.891	1.00	20.64	C
ATOM	3326	CG	ARG	B	514	22.723	12.689	24.724	1.00	25.83	C
ATOM	3327	CD	ARG	B	514	23.204	13.947	24.011	1.00	35.37	C
ATOM	3328	NE	ARG	B	514	22.455	15.060	24.415	1.00	43.69	N
ATOM	3329	CZ	ARG	B	514	21.394	15.577	24.923	1.00	51.47	C
ATOM	3330	NH1	ARG	B	514	20.304	15.017	25.392	1.00	60.27	N
ATOM	3331	NH2	ARG	B	514	21.323	16.891	25.016	1.00	57.39	N
ATOM	3332	N	HIS	B	515	23.484	9.350	23.563	1.00	17.72	N
ATOM	3333	CA	HIS	B	515	24.641	8.527	24.041	1.00	19.41	C
ATOM	3334	C	HIS	B	515	25.609	8.235	22.923	1.00	17.42	C
ATOM	3335	O	HIS	B	515	26.833	8.352	23.105	1.00	18.81	O
ATOM	3336	CB	HIS	B	515	23.964	7.245	24.547	1.00	19.53	C
ATOM	3337	CG	HIS	B	515	24.967	6.484	25.347	1.00	24.48	C
ATOM	3338	ND1	HIS	B	515	25.814	5.598	24.711	1.00	39.46	N
ATOM	3339	CD2	HIS	B	515	25.237	6.457	26.665	1.00	28.08	C
ATOM	3340	CE1	HIS	B	515	26.596	5.036	25.611	1.00	33.92	C
ATOM	3341	NE2	HIS	B	515	26.258	5.525	26.792	1.00	34.27	N
ATOM	3342	N	ALA	B	516	25.130	7.970	21.699	1.00	19.19	N
ATOM	3343	CA	ALA	B	516	26.082	7.720	20.593	1.00	15.11	C
ATOM	3344	C	ALA	B	516	26.867	8.947	20.257	1.00	16.34	C
ATOM	3345	O	ALA	B	516	28.068	8.937	19.968	1.00	17.56	O
ATOM	3346	CB	ALA	B	516	25.327	7.177	19.359	1.00	17.83	C
ATOM	3347	N	SER	B	517	26.166	10.096	20.266	1.00	15.85	N
ATOM	3348	CA	SER	B	517	26.891	11.347	19.977	1.00	15.27	C
ATOM	3349	C	SER	B	517	27.920	11.649	21.051	1.00	18.02	C
ATOM	3350	O	SER	B	517	29.050	12.088	20.754	1.00	17.13	O
ATOM	3351	CB	SER	B	517	25.838	12.475	19.866	1.00	18.28	C
ATOM	3352	OG	SER	B	517	25.189	12.747	21.054	1.00	29.75	O
ATOM	3353	N	ASN	B	518	27.604	11.369	22.326	1.00	14.32	N
ATOM	3354	CA	ASN	B	518	28.587	11.664	23.377	1.00	14.12	C
ATOM	3355	C	ASN	B	518	29.805	10.730	23.197	1.00	15.89	C
ATOM	3356	O	ASN	B	518	30.927	11.214	23.310	1.00	18.55	O
ATOM	3357	CB	ASN	B	518	27.901	11.353	24.713	1.00	18.47	C
ATOM	3358	CG	ASN	B	518	26.965	12.556	25.079	1.00	23.21	C
ATOM	3359	OD1	ASN	B	518	27.007	13.650	24.599	1.00	33.02	O
ATOM	3360	ND2	ASN	B	518	26.100	12.019	25.959	1.00	24.38	N
ATOM	3361	N	LYS	B	519	29.461	9.465	22.896	1.00	16.87	N
ATOM	3362	CA	LYS	B	519	30.631	8.547	22.734	1.00	20.10	C
ATOM	3363	C	LYS	B	519	31.444	8.876	21.488	1.00	23.76	C
ATOM	3364	O	LYS	B	519	32.691	8.723	21.474	1.00	16.66	O
ATOM	3365	CB	LYS	B	519	30.172	7.094	22.727	1.00	18.89	C
ATOM	3366	CG	LYS	B	519	29.394	6.586	23.923	1.00	31.80	C
ATOM	3367	CD	LYS	B	519	29.724	7.102	25.286	1.00	43.98	C
ATOM	3368	CE	LYS	B	519	31.035	6.723	25.916	1.00	48.07	C
ATOM	3369	NZ	LYS	B	519	31.007	5.403	26.621	1.00	54.91	N
ATOM	3370	N	GLY	B	520	30.769	9.348	20.435	1.00	19.42	N
ATOM	3371	CA	GLY	B	520	31.438	9.749	19.198	1.00	18.51	C
ATOM	3372	C	GLY	B	520	32.290	10.965	19.436	1.00	19.23	C
ATOM	3373	O	GLY	B	520	33.426	11.046	18.973	1.00	18.96	O
ATOM	3374	N	MET	B	521	31.831	11.961	20.208	1.00	16.60	N
ATOM	3375	CA	MET	B	521	32.612	13.162	20.468	1.00	19.17	C
ATOM	3376	C	MET	B	521	33.820	12.807	21.339	1.00	21.93	C
ATOM	3377	O	MET	B	521	34.905	13.329	21.135	1.00	20.60	O
ATOM	3378	CB	MET	B	521	31.747	14.198	21.220	1.00	21.74	C
ATOM	3379	CG	MET	B	521	30.607	14.758	20.381	1.00	24.15	C
ATOM	3380	SD	MET	B	521	31.265	15.823	19.049	1.00	26.04	S
ATOM	3381	CE	MET	B	521	31.488	17.298	20.088	1.00	30.44	C

ATOM	3382	N	GLU	B	522	33.647	11.869	22.282	1.00	20.10	N
ATOM	3383	CA	GLU	B	522	34.776	11.484	23.122	1.00	25.43	C
ATOM	3384	C	GLU	B	522	35.885	10.863	22.260	1.00	26.45	C
ATOM	3385	O	GLU	B	522	37.086	11.164	22.437	1.00	23.05	O
ATOM	3386	CB	GLU	B	522	34.254	10.423	24.133	1.00	21.69	C
ATOM	3387	CG	GLU	B	522	35.334	10.077	25.124	1.00	27.73	C
ATOM	3388	CD	GLU	B	522	34.913	8.927	26.032	1.00	31.13	C
ATOM	3389	OE1	GLU	B	522	33.872	8.299	25.821	1.00	29.63	O
ATOM	3390	OE2	GLU	B	522	35.746	8.841	26.946	1.00	33.77	O
ATOM	3391	N	HIS	B	523	35.416	10.025	21.357	1.00	20.32	N
ATOM	3392	CA	HIS	B	523	36.313	9.360	20.391	1.00	20.93	C
ATOM	3393	C	HIS	B	523	37.012	10.365	19.521	1.00	25.39	C
ATOM	3394	O	HIS	B	523	38.227	10.290	19.395	1.00	23.10	O
ATOM	3395	CB	HIS	B	523	35.544	8.328	19.575	1.00	23.46	C
ATOM	3396	CG	HIS	B	523	36.478	7.584	18.642	1.00	25.84	C
ATOM	3397	ND1	HIS	B	523	36.666	7.948	17.345	1.00	23.87	N
ATOM	3398	CD2	HIS	B	523	37.273	6.518	18.889	1.00	29.69	C
ATOM	3399	CE1	HIS	B	523	37.550	7.123	16.797	1.00	27.36	C
ATOM	3400	NE2	HIS	B	523	37.934	6.238	17.708	1.00	27.67	N
ATOM	3401	N	LEU	B	524	36.308	11.326	18.905	1.00	20.50	N
ATOM	3402	CA	LEU	B	524	36.973	12.338	18.097	1.00	23.83	C
ATOM	3403	C	LEU	B	524	37.994	13.140	18.887	1.00	25.77	C
ATOM	3404	O	LEU	B	524	39.106	13.454	18.446	1.00	21.50	O
ATOM	3405	CB	LEU	B	524	35.862	13.210	17.539	1.00	21.52	C
ATOM	3406	CG	LEU	B	524	36.271	14.466	16.765	1.00	24.32	C
ATOM	3407	CD1	LEU	B	524	37.110	14.051	15.556	1.00	19.83	C
ATOM	3408	CD2	LEU	B	524	34.958	15.143	16.323	1.00	20.24	C
ATOM	3409	N	LEU	B	525	37.635	13.523	20.113	1.00	20.25	N
ATOM	3410	CA	LEU	B	525	38.625	14.289	20.896	1.00	25.69	C
ATOM	3411	C	LEU	B	525	39.888	13.413	21.066	1.00	24.56	C
ATOM	3412	O	LEU	B	525	41.035	13.864	20.924	1.00	25.34	O
ATOM	3413	CB	LEU	B	525	38.020	14.641	22.256	1.00	23.20	C
ATOM	3414	CG	LEU	B	525	38.942	15.434	23.191	1.00	25.59	C
ATOM	3415	CD1	LEU	B	525	39.578	16.654	22.575	1.00	28.37	C
ATOM	3416	CD2	LEU	B	525	38.141	15.921	24.409	1.00	33.64	C
ATOM	3417	N	ASN	B	526	39.695	12.170	21.401	1.00	23.55	N
ATOM	3418	CA	ASN	B	526	40.832	11.236	21.523	1.00	28.62	C
ATOM	3419	C	ASN	B	526	41.638	11.161	20.235	1.00	29.46	C
ATOM	3420	O	ASN	B	526	42.886	11.140	20.265	1.00	24.90	O
ATOM	3421	CB	ASN	B	526	40.331	9.881	21.996	1.00	28.03	C
ATOM	3422	CG	ASN	B	526	39.994	9.832	23.482	1.00	35.41	C
ATOM	3423	OD1	ASN	B	526	40.551	10.585	24.281	1.00	33.77	O
ATOM	3424	ND2	ASN	B	526	39.088	8.933	23.839	1.00	34.04	N
ATOM	3425	N	MET	B	527	41.015	11.198	19.057	1.00	24.95	N
ATOM	3426	CA	MET	B	527	41.708	11.174	17.769	1.00	25.60	C
ATOM	3427	C	MET	B	527	42.488	12.460	17.537	1.00	26.85	C
ATOM	3428	O	MET	B	527	43.626	12.425	17.038	1.00	29.13	O
ATOM	3429	CB	MET	B	527	40.715	10.916	16.641	1.00	28.30	C
ATOM	3430	CG	MET	B	527	40.079	9.529	16.527	1.00	22.52	C
ATOM	3431	SD	MET	B	527	41.342	8.219	16.443	1.00	30.70	S
ATOM	3432	CE	MET	B	527	41.422	7.830	18.188	1.00	31.91	C
ATOM	3433	N	LYS	B	528	41.987	13.595	17.971	1.00	23.43	N
ATOM	3434	CA	LYS	B	528	42.705	14.868	17.880	1.00	26.38	C
ATOM	3435	C	LYS	B	528	43.913	14.849	18.816	1.00	31.70	C
ATOM	3436	O	LYS	B	528	45.026	15.174	18.370	1.00	29.21	O
ATOM	3437	CB	LYS	B	528	41.779	16.009	18.234	1.00	29.86	C
ATOM	3438	CG	LYS	B	528	42.336	17.413	18.172	1.00	29.01	C
ATOM	3439	CD	LYS	B	528	43.113	17.831	19.415	1.00	36.75	C
ATOM	3440	CE	LYS	B	528	43.464	19.315	19.289	1.00	41.62	C
ATOM	3441	NZ	LYS	B	528	43.763	19.878	20.650	1.00	47.99	N
ATOM	3442	N	CYS	B	529	43.742	14.397	20.035	1.00	27.02	N
ATOM	3443	CA	CYS	B	529	44.798	14.307	21.042	1.00	28.86	C
ATOM	3444	C	CYS	B	529	45.901	13.362	20.645	1.00	30.53	C
ATOM	3445	O	CYS	B	529	47.047	13.594	21.040	1.00	32.58	O
ATOM	3446	CB	CYS	B	529	44.201	13.981	22.433	1.00	35.32	C
ATOM	3447	SG	CYS	B	529	43.338	15.486	23.003	1.00	38.75	S
ATOM	3448	N	LYS	B	530	45.614	12.388	19.802	1.00	28.29	N
ATOM	3449	CA	LYS	B	530	46.511	11.398	19.246	1.00	31.42	C
ATOM	3450	C	LYS	B	530	47.140	11.887	17.944	1.00	27.27	C
ATOM	3451	O	LYS	B	530	47.942	11.204	17.314	1.00	31.67	O
ATOM	3452	CB	LYS	B	530	45.654	10.141	18.988	1.00	33.17	C
ATOM	3453	CG	LYS	B	530	46.422	8.905	18.632	1.00	41.59	C
ATOM	3454	CD	LYS	B	530	45.471	7.761	18.253	1.00	29.36	C
ATOM	3455	CE	LYS	B	530	46.310	6.765	17.488	1.00	35.55	C
ATOM	3456	NZ	LYS	B	530	45.789	5.391	17.518	1.00	35.31	N
ATOM	3457	N	ASN	B	531	46.811	13.118	17.528	1.00	25.91	N
ATOM	3458	CA	ASN	B	531	47.347	13.713	16.304	1.00	30.46	C

ATOM	3459	C	ASN	B	531	46.902	13.034	15.022	1.00	31.27	C
ATOM	3460	O	ASN	B	531	47.585	13.155	13.991	1.00	28.41	O
ATOM	3461	CB	ASN	B	531	48.889	13.793	16.383	1.00	30.45	C
ATOM	3462	CG	ASN	B	531	49.304	14.743	17.504	1.00	39.58	C
ATOM	3463	OD1	ASN	B	531	49.678	14.366	18.623	1.00	36.05	O
ATOM	3464	ND2	ASN	B	531	49.187	16.044	17.258	1.00	35.04	N
ATOM	3465	N	VAL	B	532	45.734	12.377	15.020	1.00	28.01	N
ATOM	3466	CA	VAL	B	532	45.186	11.714	13.840	1.00	29.98	C
ATOM	3467	C	VAL	B	532	44.368	12.687	13.009	1.00	30.41	C
ATOM	3468	O	VAL	B	532	44.263	12.574	11.785	1.00	28.60	O
ATOM	3469	CB	VAL	B	532	44.390	10.454	14.257	1.00	29.00	C
ATOM	3470	CG1	VAL	B	532	43.649	9.804	13.088	1.00	28.46	C
ATOM	3471	CG2	VAL	B	532	45.415	9.473	14.831	1.00	30.80	C
ATOM	3472	N	VAL	B	533	43.672	13.600	13.685	1.00	25.44	N
ATOM	3473	CA	VAL	B	533	42.933	14.676	13.079	1.00	27.02	C
ATOM	3474	C	VAL	B	533	43.376	15.979	13.765	1.00	25.40	C
ATOM	3475	O	VAL	B	533	43.700	16.066	14.956	1.00	29.36	O
ATOM	3476	CB	VAL	B	533	41.397	14.535	13.241	1.00	24.66	C
ATOM	3477	CG1	VAL	B	533	40.874	13.320	12.485	1.00	26.45	C
ATOM	3478	CG2	VAL	B	533	41.011	14.527	14.699	1.00	23.82	C
ATOM	3479	N	PRO	B	534	43.251	17.087	13.047	1.00	27.85	N
ATOM	3480	CA	PRO	B	534	43.681	18.366	13.555	1.00	32.15	C
ATOM	3481	C	PRO	B	534	42.778	19.000	14.583	1.00	30.18	C
ATOM	3482	O	PRO	B	534	43.262	19.800	15.358	1.00	30.62	O
ATOM	3483	CB	PRO	B	534	43.653	19.283	12.316	1.00	32.15	C
ATOM	3484	CG	PRO	B	534	42.778	18.627	11.320	1.00	29.14	C
ATOM	3485	CD	PRO	B	534	42.893	17.136	11.607	1.00	29.21	C
ATOM	3486	N	VAL	B	535	41.445	18.825	14.472	1.00	28.17	N
ATOM	3487	CA	VAL	B	535	40.597	19.521	15.441	1.00	32.07	C
ATOM	3488	C	VAL	B	535	39.468	18.630	15.932	1.00	30.10	C
ATOM	3489	O	VAL	B	535	39.126	17.651	15.295	1.00	26.97	O
ATOM	3490	CB	VAL	B	535	39.999	20.809	14.832	1.00	34.84	C
ATOM	3491	CG1	VAL	B	535	41.032	21.890	14.529	1.00	36.98	C
ATOM	3492	CG2	VAL	B	535	39.255	20.409	13.572	1.00	31.81	C
ATOM	3493	N	TYR	B	536	38.831	19.062	17.003	1.00	30.00	N
ATOM	3494	CA	TYR	B	536	37.724	18.337	17.616	1.00	28.84	C
ATOM	3495	C	TYR	B	536	36.376	18.981	17.329	1.00	29.31	C
ATOM	3496	O	TYR	B	536	35.403	18.246	17.047	1.00	27.74	O
ATOM	3497	CB	TYR	B	536	38.008	18.489	19.142	1.00	34.32	C
ATOM	3498	CG	TYR	B	536	36.918	18.169	20.108	1.00	35.17	C
ATOM	3499	CD1	TYR	B	536	36.298	16.928	20.114	1.00	37.04	C
ATOM	3500	CD2	TYR	B	536	36.522	19.088	21.077	1.00	36.24	C
ATOM	3501	CE1	TYR	B	536	35.305	16.590	21.015	1.00	35.06	C
ATOM	3502	CE2	TYR	B	536	35.542	18.775	22.004	1.00	38.43	C
ATOM	3503	CZ	TYR	B	536	34.948	17.524	21.970	1.00	42.22	C
ATOM	3504	OH	TYR	B	536	33.966	17.244	22.897	1.00	43.09	O
ATOM	3505	N	ASP	B	537	36.287	20.310	17.501	1.00	27.59	N
ATOM	3506	CA	ASP	B	537	35.014	20.990	17.261	1.00	26.75	C
ATOM	3507	C	ASP	B	537	34.844	21.251	15.770	1.00	21.54	C
ATOM	3508	O	ASP	B	537	35.245	22.251	15.172	1.00	25.75	O
ATOM	3509	CB	ASP	B	537	34.935	22.260	18.124	1.00	34.07	C
ATOM	3510	CG	ASP	B	537	33.646	23.015	17.986	1.00	37.10	C
ATOM	3511	OD1	ASP	B	537	32.819	22.699	17.100	1.00	31.06	O
ATOM	3512	OD2	ASP	B	537	33.377	23.965	18.764	1.00	41.65	O
ATOM	3513	N	LEU	B	538	34.176	20.290	15.097	1.00	21.88	N
ATOM	3514	CA	LEU	B	538	33.969	20.358	13.658	1.00	19.71	C
ATOM	3515	C	LEU	B	538	33.040	21.491	13.255	1.00	22.91	C
ATOM	3516	O	LEU	B	538	33.160	21.957	12.131	1.00	24.45	O
ATOM	3517	CB	LEU	B	538	33.492	19.001	13.110	1.00	18.93	C
ATOM	3518	CG	LEU	B	538	34.418	17.824	13.459	1.00	22.91	C
ATOM	3519	CD1	LEU	B	538	33.920	16.505	12.794	1.00	20.69	C
ATOM	3520	CD2	LEU	B	538	35.853	18.061	13.025	1.00	22.04	C
ATOM	3521	N	LEU	B	539	32.091	21.876	14.108	1.00	22.95	N
ATOM	3522	CA	LEU	B	539	31.189	22.953	13.701	1.00	21.70	C
ATOM	3523	C	LEU	B	539	32.004	24.268	13.686	1.00	22.79	C
ATOM	3524	O	LEU	B	539	31.823	24.990	12.726	1.00	22.25	O
ATOM	3525	CB	LEU	B	539	30.050	23.045	14.708	1.00	21.40	C
ATOM	3526	CG	LEU	B	539	29.106	24.243	14.530	1.00	23.23	C
ATOM	3527	CD1	LEU	B	539	28.381	24.140	13.201	1.00	24.06	C
ATOM	3528	CD2	LEU	B	539	28.166	24.276	15.738	1.00	26.44	C
ATOM	3529	N	LEU	B	540	32.864	24.462	14.686	1.00	23.27	N
ATOM	3530	CA	LEU	B	540	33.708	25.685	14.634	1.00	28.70	C
ATOM	3531	C	LEU	B	540	34.663	25.717	13.455	1.00	28.37	C
ATOM	3532	O	LEU	B	540	34.834	26.678	12.696	1.00	27.01	O
ATOM	3533	CB	LEU	B	540	34.507	25.810	15.930	1.00	32.27	C
ATOM	3534	CG	LEU	B	540	35.516	26.965	16.014	1.00	34.48	C
ATOM	3535	CD1	LEU	B	540	34.820	28.314	16.024	1.00	36.62	C

ATOM	3536	CD2	LEU	B	540	36.392	26.787	17.238	1.00	33.58	C
ATOM	3537	N	GLU	B	541	35.261	24.554	13.163	1.00	25.90	N
ATOM	3538	CA	GLU	B	541	36.110	24.377	12.007	1.00	28.83	C
ATOM	3539	C	GLU	B	541	35.353	24.677	10.716	1.00	26.71	C
ATOM	3540	O	GLU	B	541	35.907	25.264	9.780	1.00	27.58	O
ATOM	3541	CB	GLU	B	541	36.668	22.954	11.942	1.00	31.67	C
ATOM	3542	CG	GLU	B	541	37.586	22.755	10.739	1.00	37.81	C
ATOM	3543	CD	GLU	B	541	38.822	23.628	10.726	1.00	42.72	C
ATOM	3544	OE1	GLU	B	541	39.328	24.080	11.773	1.00	41.96	O
ATOM	3545	OE2	GLU	B	541	39.364	23.882	9.619	1.00	49.77	O
ATOM	3546	N	MET	B	542	34.101	24.215	10.582	1.00	21.11	N
ATOM	3547	CA	MET	B	542	33.361	24.549	9.369	1.00	21.46	C
ATOM	3548	C	MET	B	542	33.144	26.074	9.333	1.00	22.23	C
ATOM	3549	O	MET	B	542	33.300	26.628	8.239	1.00	25.20	O
ATOM	3550	CB	MET	B	542	32.003	23.847	9.390	1.00	21.82	C
ATOM	3551	CG	MET	B	542	31.146	23.993	8.154	1.00	27.74	C
ATOM	3552	SD	MET	B	542	30.138	25.489	8.182	1.00	24.48	S
ATOM	3553	CE	MET	B	542	29.030	25.202	9.538	1.00	23.74	C
ATOM	3554	N	LEU	B	543	32.654	26.637	10.427	1.00	25.07	N
ATOM	3555	CA	LEU	B	543	32.384	28.096	10.400	1.00	32.44	C
ATOM	3556	C	LEU	B	543	33.648	28.931	10.186	1.00	32.47	C
ATOM	3557	O	LEU	B	543	33.626	29.919	9.434	1.00	39.36	O
ATOM	3558	CB	LEU	B	543	31.756	28.506	11.736	1.00	28.21	C
ATOM	3559	CG	LEU	B	543	30.295	28.017	11.868	1.00	27.82	C
ATOM	3560	CD1	LEU	B	543	29.856	28.264	13.307	1.00	30.68	C
ATOM	3561	CD2	LEU	B	543	29.426	28.759	10.866	1.00	30.79	C
ATOM	3562	N	ASN	B	544	34.734	28.558	10.811	1.00	33.87	N
ATOM	3563	CA	ASN	B	544	36.008	29.257	10.626	1.00	39.63	C
ATOM	3564	C	ASN	B	544	36.436	29.221	9.162	1.00	41.53	C
ATOM	3565	O	ASN	B	544	36.977	30.193	8.636	1.00	42.20	O
ATOM	3566	CB	ASN	B	544	37.102	28.607	11.477	1.00	36.92	C
ATOM	3567	CG	ASN	B	544	37.112	28.924	12.951	1.00	39.12	C
ATOM	3568	OD1	ASN	B	544	37.757	28.217	13.756	1.00	37.46	O
ATOM	3569	ND2	ASN	B	544	36.493	29.972	13.428	1.00	29.53	N
ATOM	3570	N	ALA	B	545	36.256	28.101	8.473	1.00	40.06	N
ATOM	3571	CA	ALA	B	545	36.666	27.896	7.108	1.00	39.33	C
ATOM	3572	C	ALA	B	545	35.732	28.432	6.039	1.00	39.87	C
ATOM	3573	O	ALA	B	545	36.193	28.906	4.998	1.00	40.21	O
ATOM	3574	CB	ALA	B	545	36.819	26.376	6.841	1.00	33.40	C
ATOM	3575	N	HIS	B	546	34.431	28.411	6.293	1.00	36.60	N
ATOM	3576	CA	HIS	B	546	33.480	28.821	5.244	1.00	38.90	C
ATOM	3577	C	HIS	B	546	33.205	30.297	5.338	1.00	39.14	C
ATOM	3578	O	HIS	B	546	33.394	30.906	6.385	1.00	43.73	O
ATOM	3579	CB	HIS	B	546	32.268	27.883	5.289	1.00	37.08	C
ATOM	3580	CG	HIS	B	546	32.547	26.471	4.852	1.00	36.68	C
ATOM	3581	ND1	HIS	B	546	32.182	25.966	3.629	1.00	36.35	N
ATOM	3582	CD2	HIS	B	546	33.186	25.442	5.473	1.00	40.79	C
ATOM	3583	CE1	HIS	B	546	32.561	24.716	3.497	1.00	35.39	C
ATOM	3584	NE2	HIS	B	546	33.165	24.361	4.640	1.00	38.95	N
ATOM	3585	N	VAL	B	547	33.003	30.981	4.208	1.00	42.53	N
ATOM	3586	CA	VAL	B	547	32.780	32.419	4.181	1.00	40.61	C
ATOM	3587	C	VAL	B	547	31.349	32.788	3.798	1.00	39.74	C
ATOM	3588	O	VAL	B	547	30.740	32.127	2.957	1.00	46.40	O
ATOM	3589	CB	VAL	B	547	33.726	33.076	3.154	1.00	42.18	C
ATOM	3590	CG1	VAL	B	547	33.616	32.422	1.780	1.00	41.34	C
ATOM	3591	CG2	VAL	B	547	33.495	34.575	3.040	1.00	43.99	C
ATOM	3592	N	LEU	B	548	30.827	33.854	4.375	1.00	43.11	N
ATOM	3593	CA	LEU	B	548	29.489	34.369	4.090	1.00	43.63	C
ATOM	3594	C	LEU	B	548	29.417	34.918	2.660	1.00	48.73	C
ATOM	3595	O	LEU	B	548	30.417	35.117	1.969	1.00	47.22	O
ATOM	3596	CB	LEU	B	548	29.044	35.433	5.094	1.00	42.47	C
ATOM	3597	CG	LEU	B	548	28.696	34.945	6.515	1.00	42.36	C
ATOM	3598	CD1	LEU	B	548	28.361	36.107	7.435	1.00	39.25	C
ATOM	3599	CD2	LEU	B	548	27.522	33.977	6.526	1.00	37.00	C
ATOM	3600	N	ALA	B	549	28.184	35.165	2.229	1.00	53.29	N
ATOM	3601	CA	ALA	B	549	27.801	35.658	0.924	1.00	57.20	C
ATOM	3602	C	ALA	B	549	27.755	37.172	0.789	1.00	58.59	C
ATOM	3603	O	ALA	B	549	27.504	37.897	1.766	1.00	60.47	O
ATOM	3604	CB	ALA	B	549	26.397	35.104	0.615	1.00	58.47	C
ATOM	3605	C1	GEN	C	601	32.490	11.892	39.227	1.00	23.90	C
ATOM	3606	C2	GEN	C	601	32.091	10.767	39.973	1.00	23.88	C
ATOM	3607	C3	GEN	C	601	30.791	10.807	40.540	1.00	21.97	C
ATOM	3608	C4	GEN	C	601	29.974	11.941	40.273	1.00	20.22	C
ATOM	3609	C5	GEN	C	601	30.407	13.070	39.515	1.00	22.71	C
ATOM	3610	C6	GEN	C	601	31.687	13.016	38.980	1.00	24.29	C
ATOM	3611	O9	GEN	C	601	30.434	9.701	41.275	1.00	23.58	O
ATOM	3612	C10	GEN	C	601	29.135	9.720	41.824	1.00	20.60	C

ATOM	3613	C11	GEN	C	601	28.291	10.807	41.674	1.00	18.73	C
ATOM	3614	C12	GEN	C	601	28.643	12.006	40.859	1.00	18.14	C
ATOM	3615	C14	GEN	C	601	26.934	10.633	42.366	1.00	23.96	C
ATOM	3616	C15	GEN	C	601	26.998	10.018	43.636	1.00	19.90	C
ATOM	3617	C16	GEN	C	601	25.776	9.792	44.345	1.00	20.07	C
ATOM	3618	C17	GEN	C	601	24.614	10.226	43.655	1.00	20.86	C
ATOM	3619	C18	GEN	C	601	24.573	10.850	42.417	1.00	18.28	C
ATOM	3620	C19	GEN	C	601	25.767	11.099	41.719	1.00	16.50	C
ATOM	3621	O24	GEN	C	601	23.370	10.045	44.278	1.00	19.59	O
ATOM	3622	O25	GEN	C	601	29.585	14.156	39.335	1.00	21.98	O
ATOM	3623	O26	GEN	C	601	33.774	11.844	38.689	1.00	20.60	O
ATOM	3624	O27	GEN	C	601	27.876	12.939	40.682	1.00	19.82	O
ATOM	3625	C1	GEN	D	601	34.731	10.000	15.313	1.00	20.77	C
ATOM	3626	C2	GEN	D	601	34.440	11.148	14.517	1.00	20.53	C
ATOM	3627	C3	GEN	D	601	33.256	11.061	13.736	1.00	22.18	C
ATOM	3628	C4	GEN	D	601	32.411	9.951	13.824	1.00	17.57	C
ATOM	3629	C5	GEN	D	601	32.748	8.810	14.669	1.00	20.54	C
ATOM	3630	C6	GEN	D	601	33.914	8.885	15.399	1.00	18.54	C
ATOM	3631	O9	GEN	D	601	32.964	12.148	12.954	1.00	21.72	O
ATOM	3632	C10	GEN	D	601	31.785	12.156	12.179	1.00	21.94	C
ATOM	3633	C11	GEN	D	601	30.924	11.060	12.149	1.00	18.11	C
ATOM	3634	C12	GEN	D	601	31.189	9.872	13.066	1.00	21.61	C
ATOM	3635	C14	GEN	D	601	29.691	11.207	11.272	1.00	17.89	C
ATOM	3636	C15	GEN	D	601	29.976	11.887	10.015	1.00	17.97	C
ATOM	3637	C16	GEN	D	601	28.831	12.058	9.180	1.00	19.03	C
ATOM	3638	C17	GEN	D	601	27.595	11.594	9.607	1.00	19.16	C
ATOM	3639	C18	GEN	D	601	27.347	10.930	10.842	1.00	18.76	C
ATOM	3640	C19	GEN	D	601	28.475	10.743	11.680	1.00	18.44	C
ATOM	3641	O24	GEN	D	601	26.486	11.807	8.806	1.00	19.69	O
ATOM	3642	O25	GEN	D	601	31.896	7.770	14.659	1.00	23.07	O
ATOM	3643	O26	GEN	D	601	35.877	10.078	16.050	1.00	21.64	O
ATOM	3644	O27	GEN	D	601	30.419	8.942	13.063	1.00	21.28	O
ATOM	3645	OW0	WAT	W	1	20.594	8.842	43.843	1.00	18.37	O
ATOM	3646	OW0	WAT	W	2	14.063	18.381	7.933	1.00	21.34	O
ATOM	3647	OW0	WAT	W	3	34.441	20.788	9.936	1.00	22.98	O
ATOM	3648	OW0	WAT	W	4	23.692	13.028	8.639	1.00	21.23	O
ATOM	3649	OW0	WAT	W	5	19.222	22.147	42.611	1.00	23.71	O
ATOM	3650	OW0	WAT	W	6	11.448	4.004	40.415	1.00	23.15	O
ATOM	3651	OW0	WAT	W	7	23.203	15.680	5.742	1.00	23.89	O
ATOM	3652	OW0	WAT	W	8	21.871	14.905	9.573	1.00	22.37	O
ATOM	3653	OW0	WAT	W	9	27.959	17.792	18.999	1.00	27.12	O
ATOM	3654	OW0	WAT	W	10	11.009	3.171	42.889	1.00	23.32	O
ATOM	3655	OW0	WAT	W	11	14.021	17.668	10.521	1.00	23.54	O
ATOM	3656	OW0	WAT	W	12	19.633	6.095	46.714	1.00	24.75	O
ATOM	3657	OW0	WAT	W	13	21.902	17.659	9.044	1.00	27.81	O
ATOM	3658	OW0	WAT	W	14	18.986	6.850	42.583	1.00	19.48	O
ATOM	3659	OW0	WAT	W	15	25.651	16.524	19.584	1.00	20.56	O
ATOM	3660	OW0	WAT	W	16	22.299	-0.256	9.519	1.00	29.51	O
ATOM	3661	OW0	WAT	W	17	15.024	10.870	25.417	1.00	27.29	O
ATOM	3662	OW0	WAT	W	18	23.250	18.239	6.810	1.00	25.22	O
ATOM	3663	OW0	WAT	W	19	26.908	4.204	34.548	1.00	24.63	O
ATOM	3664	OW0	WAT	W	20	18.354	28.175	4.814	1.00	33.17	O
ATOM	3665	OW0	WAT	W	21	19.790	3.374	45.626	1.00	24.25	O
ATOM	3666	OW0	WAT	W	22	18.007	22.841	3.919	1.00	27.68	O
ATOM	3667	OW0	WAT	W	23	46.993	5.908	9.668	1.00	26.51	O
ATOM	3668	OW0	WAT	W	24	24.507	5.376	33.461	1.00	21.53	O
ATOM	3669	OW0	WAT	W	25	19.262	17.958	8.795	1.00	25.20	O
ATOM	3670	OW0	WAT	W	26	35.957	18.589	9.557	1.00	27.11	O
ATOM	3671	OW0	WAT	W	27	19.056	4.126	43.078	1.00	24.17	O
ATOM	3672	OW0	WAT	W	28	13.848	30.071	10.671	1.00	30.60	O
ATOM	3673	OW0	WAT	W	29	14.277	-1.107	47.634	1.00	29.57	O
ATOM	3674	OW0	WAT	W	30	1.298	10.175	20.241	1.00	23.69	O
ATOM	3675	OW0	WAT	W	31	31.050	8.239	29.186	1.00	30.83	O
ATOM	3676	OW0	WAT	W	32	18.563	23.370	40.373	1.00	27.01	O
ATOM	3677	OW0	WAT	W	33	20.290	21.874	20.963	1.00	33.27	O
ATOM	3678	OW0	WAT	W	34	17.478	6.072	28.714	1.00	35.57	O
ATOM	3679	OW0	WAT	W	35	50.053	12.647	12.109	1.00	37.72	O
ATOM	3680	OW0	WAT	W	36	20.619	1.437	21.138	1.00	30.60	O
ATOM	3681	OW0	WAT	W	37	21.302	-4.994	47.887	1.00	29.39	O
ATOM	3682	OW0	WAT	W	38	28.170	9.720	-1.849	1.00	32.07	O
ATOM	3683	OW0	WAT	W	39	31.362	1.220	44.700	1.00	29.94	O
ATOM	3684	OW0	WAT	W	40	20.546	22.103	3.866	1.00	28.15	O
ATOM	3685	OW0	WAT	W	41	46.350	2.724	9.952	1.00	30.93	O
ATOM	3686	OW0	WAT	W	42	15.588	16.297	49.060	1.00	32.92	O
ATOM	3687	OW0	WAT	W	43	39.739	17.212	12.409	1.00	28.98	O
ATOM	3688	OW0	WAT	W	44	18.564	13.342	22.347	1.00	27.99	O
ATOM	3689	OW0	WAT	W	45	11.265	-8.394	40.040	1.00	33.13	O

ATOM	3690	OW0	WAT	W	46	3.123	12.261	42.568	1.00	28.66	O
ATOM	3691	OW0	WAT	W	47	31.354	13.280	25.163	1.00	28.87	O
ATOM	3692	OW0	WAT	W	48	0.658	11.369	28.091	1.00	31.71	O
ATOM	3693	OW0	WAT	W	49	38.712	22.250	18.051	1.00	40.44	O
ATOM	3694	OW0	WAT	W	50	43.645	4.572	40.510	1.00	41.82	O
ATOM	3695	OW0	WAT	W	51	38.532	18.730	10.324	1.00	34.38	O
ATOM	3696	OW0	WAT	W	52	-1.359	10.932	29.947	1.00	31.87	O
ATOM	3697	OW0	WAT	W	53	19.994	5.430	2.327	1.00	35.83	O
ATOM	3698	OW0	WAT	W	54	50.451	11.840	19.513	1.00	40.45	O
ATOM	3699	OW0	WAT	W	55	3.107	19.354	37.985	1.00	32.85	O
ATOM	3700	OW0	WAT	W	56	32.747	3.464	45.164	1.00	30.83	O
ATOM	3701	OW0	WAT	W	57	18.054	8.351	29.482	1.00	29.81	O
ATOM	3702	OW0	WAT	W	58	23.833	12.539	2.117	1.00	29.50	O
ATOM	3703	OW0	WAT	W	59	36.952	4.680	42.871	1.00	32.99	O
ATOM	3704	OW0	WAT	W	60	13.874	18.788	46.438	1.00	34.68	O
ATOM	3705	OW0	WAT	W	61	45.734	2.950	16.128	1.00	34.00	O
ATOM	3706	OW0	WAT	W	62	31.298	2.999	-0.169	1.00	32.57	O
ATOM	3707	OW0	WAT	W	63	46.735	3.167	23.449	1.00	34.81	O
ATOM	3708	OW0	WAT	W	64	5.146	15.414	44.002	1.00	36.81	O
ATOM	3709	OW0	WAT	W	65	19.618	9.333	50.357	1.00	37.68	O
ATOM	3710	OW0	WAT	W	66	21.594	9.697	48.584	1.00	32.45	O
ATOM	3711	OW0	WAT	W	67	20.632	14.698	7.174	1.00	33.83	O
ATOM	3712	OW0	WAT	W	68	28.617	19.529	20.885	1.00	33.83	O
ATOM	3713	OW0	WAT	W	69	16.831	-0.400	48.082	1.00	29.67	O
ATOM	3714	OW0	WAT	W	70	2.344	21.666	15.297	1.00	25.54	O
ATOM	3715	OW0	WAT	W	71	5.913	26.127	8.045	1.00	33.92	O
ATOM	3716	OW0	WAT	W	72	43.476	16.411	46.827	1.00	35.61	O
ATOM	3717	OW0	WAT	W	73	40.314	16.049	9.730	1.00	44.75	O
ATOM	3718	OW0	WAT	W	74	12.341	2.799	23.103	1.00	35.80	O
ATOM	3719	OW0	WAT	W	75	6.274	9.180	6.926	1.00	28.66	O
ATOM	3720	OW0	WAT	W	76	27.429	28.031	45.111	1.00	37.68	O
ATOM	3721	OW0	WAT	W	77	19.214	20.278	31.073	1.00	33.73	O
ATOM	3722	OW0	WAT	W	78	27.839	2.397	32.790	1.00	33.02	O
ATOM	3723	OW0	WAT	W	79	-2.391	20.534	10.657	1.00	33.99	O
ATOM	3724	OW0	WAT	W	80	3.501	6.274	12.553	1.00	34.23	O
ATOM	3725	OW0	WAT	W	81	23.056	16.556	21.213	1.00	35.55	O
ATOM	3726	OW0	WAT	W	82	1.730	19.909	29.262	1.00	29.41	O
ATOM	3727	OW0	WAT	W	83	21.402	-15.296	31.401	1.00	37.68	O
ATOM	3728	OW0	WAT	W	84	21.577	-1.704	11.851	1.00	29.83	O
ATOM	3729	OW0	WAT	W	85	31.911	11.942	53.219	1.00	42.18	O
ATOM	3730	OW0	WAT	W	86	-2.039	3.962	30.860	1.00	41.23	O
ATOM	3731	OW0	WAT	W	87	28.451	21.819	0.247	1.00	77.26	O
ATOM	3732	OW0	WAT	W	88	19.924	25.865	40.473	1.00	31.60	O
ATOM	3733	OW0	WAT	W	89	33.450	7.157	30.384	1.00	39.19	O
ATOM	3734	OW0	WAT	W	90	52.964	10.366	18.355	1.00	26.42	O
ATOM	3735	OW0	WAT	W	91	16.263	3.694	42.911	1.00	25.64	O
ATOM	3736	OW0	WAT	W	92	18.833	4.410	30.465	1.00	31.34	O
ATOM	3737	OW0	WAT	W	93	28.412	17.068	-2.056	1.00	29.02	O
ATOM	3738	OW0	WAT	W	94	14.490	23.651	24.369	1.00	34.47	O
ATOM	3739	OW0	WAT	W	95	30.926	-4.668	52.419	1.00	46.78	O
ATOM	3740	OW0	WAT	W	96	11.689	18.916	27.939	1.00	44.56	O
ATOM	3741	OW0	WAT	W	97	30.260	0.786	34.779	1.00	37.00	O
ATOM	3742	OW0	WAT	W	98	22.914	-4.010	11.910	1.00	39.16	O
ATOM	3743	OW0	WAT	W	99	20.013	15.557	-3.230	1.00	43.89	O
ATOM	3744	OW0	WAT	W	100	27.122	15.082	22.406	1.00	38.38	O
ATOM	3745	OW0	WAT	W	101	33.984	6.935	23.167	1.00	31.70	O
ATOM	3746	OW0	WAT	W	102	48.239	10.877	11.122	1.00	39.32	O
ATOM	3747	OW0	WAT	W	103	39.777	10.123	46.483	1.00	40.48	O
ATOM	3748	OW0	WAT	W	104	15.913	5.068	4.962	1.00	38.55	O
ATOM	3749	OW0	WAT	W	105	8.813	-9.674	40.078	1.00	53.32	O
ATOM	3750	OW0	WAT	W	106	47.605	16.487	21.063	1.00	40.23	O
ATOM	3751	OW0	WAT	W	107	35.602	3.446	44.927	1.00	39.85	O
ATOM	3752	OW0	WAT	W	108	31.129	-6.169	8.662	1.00	41.30	O
ATOM	3753	OW0	WAT	W	109	11.427	31.547	10.265	1.00	41.49	O
ATOM	3754	OW0	WAT	W	110	14.396	-1.879	26.658	1.00	36.77	O
ATOM	3755	OW0	WAT	W	111	46.762	18.021	19.152	1.00	46.85	O
ATOM	3756	OW0	WAT	W	112	43.398	5.319	2.222	1.00	52.48	O
ATOM	3757	OW0	WAT	W	113	34.516	20.702	2.758	1.00	45.48	O
ATOM	3758	OW0	WAT	W	114	36.231	-0.262	19.801	1.00	39.23	O
ATOM	3759	OW0	WAT	W	115	36.569	22.976	7.030	1.00	49.73	O
ATOM	3760	OW0	WAT	W	116	22.415	-4.926	4.527	1.00	38.24	O
ATOM	3761	OW0	WAT	W	117	4.372	25.938	10.233	1.00	39.24	O
ATOM	3762	OW0	WAT	W	118	52.348	17.172	17.310	1.00	34.24	O
ATOM	3763	OW0	WAT	W	119	40.416	21.290	54.111	1.00	49.71	O
ATOM	3764	OW0	WAT	W	120	34.032	14.639	24.790	1.00	40.57	O
ATOM	3765	OW0	WAT	W	121	40.309	20.591	9.258	1.00	42.56	O
ATOM	3766	OW0	WAT	W	122	31.232	12.395	27.555	1.00	44.52	O

ATOM	3767	OW0	WAT	W	123	39.795	-0.317	2.652	1.00	44.68	O
ATOM	3768	OW0	WAT	W	124	5.610	2.009	11.401	1.00	38.29	O
ATOM	3769	OW0	WAT	W	125	7.529	32.075	12.842	1.00	64.16	O
ATOM	3770	OW0	WAT	W	126	17.920	15.784	23.067	1.00	43.06	O
ATOM	3771	OW0	WAT	W	127	14.136	21.143	25.527	1.00	38.04	O
ATOM	3772	OW0	WAT	W	128	38.574	15.873	54.803	1.00	51.81	O
ATOM	3773	OW0	WAT	W	129	-4.788	1.197	37.196	1.00	45.96	O
ATOM	3774	OW0	WAT	W	130	17.081	7.172	44.652	1.00	38.01	O
ATOM	3775	OW0	WAT	W	131	26.355	6.784	30.899	1.00	44.15	O
ATOM	3776	OW0	WAT	W	132	29.252	-12.936	48.056	1.00	35.90	O
ATOM	3777	OW0	WAT	W	133	19.871	11.775	5.475	1.00	40.56	O
ATOM	3778	OW0	WAT	W	134	36.006	3.305	21.918	1.00	48.65	O
ATOM	3779	OW0	WAT	W	135	22.954	-4.481	0.798	1.00	50.80	O
ATOM	3780	OW0	WAT	W	136	13.207	-6.171	24.730	1.00	43.42	O
ATOM	3781	OW0	WAT	W	137	-3.317	0.489	12.332	1.00	48.64	O
ATOM	3782	OW0	WAT	W	138	25.629	12.264	4.200	1.00	38.19	O
ATOM	3783	OW0	WAT	W	139	23.573	25.238	35.587	1.00	42.16	O
ATOM	3784	OW0	WAT	W	140	40.447	10.129	3.302	1.00	34.56	O
ATOM	3785	OW0	WAT	W	141	2.625	11.927	45.379	1.00	44.63	O
ATOM	3786	OW0	WAT	W	142	25.620	18.252	-1.548	1.00	45.28	O
ATOM	3787	OW0	WAT	W	143	4.689	19.820	29.824	1.00	39.35	O
ATOM	3788	OW0	WAT	W	144	-4.941	21.975	25.303	1.00	58.01	O
ATOM	3789	OW0	WAT	W	145	-0.643	4.350	26.309	1.00	54.33	O
ATOM	3790	OW0	WAT	W	146	38.573	1.533	1.090	1.00	44.32	O
ATOM	3791	OW0	WAT	W	147	18.132	24.827	32.593	1.00	37.08	O
ATOM	3792	OW0	WAT	W	148	20.278	25.946	36.703	1.00	44.49	O
ATOM	3793	OW0	WAT	W	149	-0.072	10.577	25.625	1.00	36.84	O
ATOM	3794	OW0	WAT	W	150	16.704	-5.369	13.610	1.00	53.67	O
ATOM	3795	OW0	WAT	W	151	25.510	-2.764	29.701	1.00	34.82	O
ATOM	3796	OW0	WAT	W	152	4.332	-5.544	25.984	1.00	65.27	O
ATOM	3797	OW0	WAT	W	153	40.847	21.215	18.492	1.00	42.39	O
ATOM	3798	OW0	WAT	W	154	16.209	9.997	46.118	1.00	45.45	O
ATOM	3799	OW0	WAT	W	155	18.045	2.761	4.686	1.00	42.06	O
ATOM	3800	OW0	WAT	W	156	29.533	6.085	29.934	1.00	43.67	O
ATOM	3801	OW0	WAT	W	157	0.620	22.763	17.036	1.00	43.19	O
ATOM	3802	OW0	WAT	W	158	22.171	14.826	3.381	1.00	39.74	O
ATOM	3803	OW0	WAT	W	159	26.060	19.294	54.077	1.00	46.68	O
ATOM	3804	OW0	WAT	W	160	45.733	17.018	16.481	1.00	30.83	O
ATOM	3805	OW0	WAT	W	161	37.760	10.259	30.385	1.00	41.55	O
ATOM	3806	OW0	WAT	W	162	34.451	22.116	34.910	1.00	41.24	O
ATOM	3807	OW0	WAT	W	163	26.582	17.904	23.043	1.00	40.64	O
ATOM	3808	OW0	WAT	W	164	42.978	12.211	9.438	1.00	40.50	O
ATOM	3809	OW0	WAT	W	165	34.042	19.067	54.737	1.00	55.40	O
ATOM	3810	OW0	WAT	W	166	47.826	18.320	16.788	1.00	36.84	O
ATOM	3811	OW0	WAT	W	167	2.635	1.607	19.768	1.00	40.36	O
ATOM	3812	OW0	WAT	W	168	42.706	15.702	51.168	1.00	53.73	O
ATOM	3813	OW0	WAT	W	169	29.444	-5.469	19.727	1.00	44.18	O
ATOM	3814	OW0	WAT	W	170	0.938	0.074	33.827	1.00	39.33	O
ATOM	3815	OW0	WAT	W	171	1.355	15.318	36.571	1.00	41.72	O
ATOM	3816	OW0	WAT	W	172	35.733	22.337	38.623	1.00	48.99	O
ATOM	3817	OW0	WAT	W	173	22.025	-16.840	54.098	1.00	60.26	O
ATOM	3818	OW0	WAT	W	174	8.180	19.230	41.714	1.00	50.71	O
ATOM	3819	OW0	WAT	W	175	15.073	10.349	3.405	1.00	41.40	O
ATOM	3820	OW0	WAT	W	176	18.275	26.866	47.583	1.00	43.95	O
ATOM	3821	OW0	WAT	W	177	26.149	22.604	52.505	1.00	52.87	O
ATOM	3822	OW0	WAT	W	178	36.628	10.191	1.537	1.00	43.41	O
ATOM	3823	OW0	WAT	W	179	-0.744	-7.200	35.515	1.00	58.15	O
ATOM	3824	OW0	WAT	W	180	10.690	11.744	47.602	1.00	50.01	O
ATOM	3825	OW0	WAT	W	181	27.869	-15.330	51.231	1.00	40.75	O
ATOM	3826	OW0	WAT	W	182	27.409	16.705	57.119	1.00	47.06	O
ATOM	3827	OW0	WAT	W	183	33.387	15.056	31.663	1.00	36.85	O
ATOM	3828	OW0	WAT	W	184	31.235	21.301	19.350	1.00	46.04	O
ATOM	3829	OW0	WAT	W	185	15.569	30.920	6.508	1.00	56.60	O
ATOM	3830	OW0	WAT	W	186	44.227	10.255	22.435	1.00	38.96	O
ATOM	3831	OW0	WAT	W	187	-4.537	19.107	8.733	1.00	53.62	O
ATOM	3832	OW0	WAT	W	188	34.122	2.662	52.345	1.00	65.45	O
ATOM	3833	OW0	WAT	W	189	28.450	19.016	27.150	1.00	54.11	O

END